Record -51
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02622961 FINAL NRC EVENT REPORTING RULE ISSUED FOR SPENT FUEL FACILITIES Nuclear Waste News December 22, 1994 V. 14 NO. 50 ISSN: 0276-2897 WORD COUNT: 217

Independent spent fuel storage installations (ISFSIs) and monitored retrievable storage (MRS) facilities will have to meet tougher incident reporting requirements beginning Jan. 13.

The Nuclear Regulatory Commission Dec. 14 issued a final rule specifying notification requirements for the following events or conditions: defects in storage systems; inability to control li- censed materials: unplanned contamination events; failure of safety equipment; personal injuries; fires; and explosions.

In response to comments on the Sept. 14, 1993, draft rule, NRC clarified its position that emergencies must be reported to state and local authorities in less than an hour and to the NRC Operations Center within one hour. A licensee, however, has four hours to report non-emergency events. Written follow-up reports are due within 30 days.

The new rule also specified the need to report any "event that requires unplanned medical treatment at an off-site medical facility of an individual with radioactive contamination on the individual's clothing or body which could cause further contamination."

For more information, contact: Naiem Tanious, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, (301) 415 -6103.

% The text of the new rule, an amendment to 10 CFR Part 72, and a discussion of comments on the 1993 draft rule from the Federal Register, 4 pp., is available through BPI DocuDial, No. 48-476.

Record -52
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02622938 N.M. GOVERNOR TRIES LAST-DITCH EFFORT TO DEFEAT PRIVATE MRS Nuclear Waste News December 8, 1994 V. 14 NO. 48 ISSN: 0276-2897 WORD COUNT: 660

The private spent nuclear fuel Monitored Retrievable Storage (MRS) facility being planned by the Mescalero Apache Nation of New Mexico and a number of utilities across the country could set a dangerous precedent for other states with significant Native American populations, according to the outgoing governor of New Mexico.

"We believe members of Congress from other states will understand the danger that, once a precedent (has) been established, sites would be proposed and developed in their own states, especially those with Indian lands," said New Mexico Gov. Bruce King (D) in a Dec. 2 statement. Campaign Theme

King's opposition to the Mescalero/utilities project was a defining theme of his unsuccessful reelection campaign. New Mexico hosts a number of major nuclear facilities including the De- partment of Energy's (DOE) not-yet -operational Waste Isolation Pilot Plant (WIPP) near Carlsbad and two DOE national lab- oratories: Los Alamos and Sandia, located in Los Alamos and Albu- querque, respectively.

Despite concerns from New Mexicans and legislators about the amount of high -level radioactive waste the state is willing to ac- cept from across the nation, King's stand on the issue apparently was not enough to convince voters he deserved another term in office.

King, elected governor in 1990, however, appears to be making the best of his defeat by offering his successor, Governor-elect Gary Johnson (R), a strategy for defeating the Mescalero's private MRS venture. Johnson Given Pointers

King provided Johnson with suggestions for challenging the MRS and gave the incoming administration a full account of his administration's attempts to block construction of the project.

"We are hopeful that Congress will act to stop the interstate shipment of nuclear material without the permission of the states through which the material would pass and in which the material would be stored," King said.

The governor added he expects the newly-elected Republican- dominated Congress to be "especially sympathetic" to concerns about nuclear waste transport.

King also expects New Mexico state legislators to take up the interim storage proposal when they return to session in January. "State Sen. Tom Rutherford and others have indicated they will seek state legislation specifically targeting" the Mescaleros/utilities venture, he said.

During his term, King established a task force to study possible MRS impacts on water and air quality, human health and safety.

"We believe we can show that air and water quality off the reservation would be threatened by such a facility and that adequate steps have not been taken or proposed to protect the health and safety of New Mexicans," King said.

If the Nuclear Regulatory Commission (NRC) grants the Mescaleros and utilities a permit despite the findings of the task force, King said the state attorney general, "local communities and even affected individuals could still seek to block the permit in court." Permit Needed, King Says

King also argues that, since the Resource Conservation and Recovery Act (RCRA) requires DOE to obtain a state permit to store and dispose of waste at the WIPP site, the Mescaleros/utilities consortium also must obtain a RCRA permit "because the material designed for WIPP contains hazardous as well as radioactive waste."

Other issues King claims could complicate the project include:

* Federal and state laws governing air and water quality;
* Protection of historic sites;
* Workplace safety: King believes worker safety regulations could impede off -reservation facilities such as rail sidings or transfer stations that would receive commercial spent nuclear fuel rods from utilities across the country;
* Tribal sovereignty: Because the MRS could impact the health and safety of all New Mexicans, "no sovereign government should have the right, without representation, to make decisions affecting the health and safety of the citizens of another sovereign government," the statement says;

* utility regulation: if the utilities proceed with their involvement in the private MRS project, they could wind up in a "protracted battle with the determined residents of the state of New Mexico" King said, adding this would not be "in their best interests."

Record -53
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02610325 MPC COULD RELIEVE SF POOL STORAGE CRUNCH Nuclear Waste News December 1, 1994 ISSN: 0276-2897 WORD COUNT: 423

Nuclear utilities could get some relief from concerns with overcrowding in existing spent fuel pools when multipurpose canisters (MPCs) become available. The canisters would partially offset the cost on-site independent spent-fuel storage installations (ISFSIs), Department of Energy (DOE) studies have shown.

In a report discussed Nov. 17 at the annual winter meeting of the American Nuclear Society in Washington, D.C., DOE researchers recommended use of a dry -storage technology that would allow direct transfer of spent nuclear fuel (SNF) to transportation casks, without the need to return canisters to the spent-fuel pool at the time of acceptance by DOE.

The MPC system would minimize handling of individual SNF assemblies. It would provide compatibility between at-reactor dry storage and storage at DOE facilities. When loaded with SNF, the MPC would be welded shut once and never reopened, the DOE report said. MPCs For Utilities

DOE intends to make MPCs available to utilities to use for on- site dry storage in advance of the department's spent-fuel acceptance. The goal would be to have a package that could be ac- cepted directly for transport to a DOE site.

While utilities would need to obtain storage overpacks or units, use of an MPC would provide savings of up to $150,000 per storage unit over an all -commercial dry storage system, DOE esti- mated. As currently envisioned, MPCs would be available only for utility fuel, not DOE's own high-level wastes.

"Although a substantial amount of discharged SNF can be stored in existing spent-fuel pools at utility reactor sites, these pools are filling up," the report said. As pool capacity for a given site is reached, future SNF discharges will require additional storage capacity outside the pool.

MPCs should be available for utility use by February 1998. The canister consists of a triple-purpose, single-shelled metallic container with two lids welded to the shell, providing a dry, inert environment for SNF. A typical MPC is designed for use in temporary storage, transport, interim storage away from reactor sites, and ultimate disposal. An MPC contains an SNF blanket, canister shell, shield plug, and inner and outer lids.

Different overpacks would be used for storage, transportation and disposal, said Mark Wisenburg of the Washington-based Nuclear Energy Institute (NEI). Later, a cask-to-cask transfer would be used to move the MPC from the storage mode into the transportation cask. For permanent disposal, the MPC would be placed in a second metal cask, serving as a disposal overpack.

For copies of the report or more information, contact Wisenburg at NEI, at (202) 739-8000.

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DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02610324 OVERCOMING NIMBY NEEDED FOR SAFER NUCLEAR POWER Nuclear Waste News December 1, 1994 ISSN: 0276-2897 WORD COUNT: 275

With nuclear plants' spent fuel storage facilities nearing capacity worldwide, the United States is far from alone in its difficulty convincing citizens they should accept local siting of waste repositories, said Chang -Taeg Oh, lecturer at Kwang-Woon University in South Korea, Nov. 18 at the winter meeting of the American Nuclear Society in Washington, D.C.

Negative residential reaction to placement of radioactive waste disposal facilities should be overcome by meeting with community members and educating them on the project's goals and use, Chang- Taeg said. As in the United States, the battle over perceptions of nuclear waste storage in South Korea is a tough one, he said.

Because the Korean government traditionally ignored personal desires in favor of national development, residential ire over projects built without local input increased, Chang-Taeg said.

With the rise of a "Not in My Back Yard" (NIMBY) approach to future construction, "siting of the facilities that are badly needed by the society are often delayed due to the residents' reaction," said a study Chang-Taeg presented.

Siting of radioactive waste disposal facilities is the most pressing NIMBY problem in Korea, he noted. Due to a lack of permanent disposal and/or storage facilities, waste is stored in temporary facilities at nine nuclear power plants. As of July, 45,000 drums were stored at the plants. Without permanent disposal facilities, the temporary storage facilities will reach capacity by the year 2021.

Plant capacity at the Ulchin facility alone will be at maximum by late next year, Chang-Taeg said.

Chang-Taeg's study suggested limited public participation in plant siting. The government tends to present draft plans and have them reviewed by outside experts.

Record -55
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02591333 NARUC CALLS ON CONGRESS TO INTERVENE IN WASTE PROGRAM Nuclear Waste News November 17, 1994 V. 14 NO. 45 ISSN: 0276-2897 WORD COUNT: 1048

The full membership of the National Association of Regulatory Utility Commissioners (NARUC) will vote on a resolution that would propel nuclear waste policy issues to the forefront of its upcoming legislative agenda when the 104th Congress convenes in January.

On Nov. 16, during its 106th annual convention in Reno, Nev., NARUC's executive committee approved a draft resolution calling on Congress to ensure, among other things, the Department of Energy (DOE) begins accepting spent nuclear fuel from the nation's commercial utilities in 1998.

While the resolution still must be adopted by the full association, NARUC commissioners are expected to approve the resolution without making significant changes.

On Nov. 14, during the NARUC convention, the director of DOE's Office of Civilian Radioactive Waste Management (OCRWM) told a nuclear waste panel he expects nuclear waste policy issues to figure prominently in the 104th Congress.

"There seems to be little doubt that Congress will address radioactive waste policy next year. The dimensions of the debate are already taking form," OCRWM Director Daniel Dreyfus said. Waste Fund Constraints Must Go

Broad consensus exists within the nuclear industry that constraints on the $8 billion ratepayers have paid into the Nuclear Waste Fund should be removed, Congress likely will consider such changes to the fund in lieu of a planned Clinton administration proposal that also would remove the constraints, Dreyfus said.

But Dreyfus warned the proposal could face an uphill battle among lawmakers because unappropriated waste fund dollars are being used to offset the national budget deficit. "Deficit control...is a strong political imperative and the technical way out of the current impasse remains elusive."

Dreyfus also said he expects lawmakers to address DOE's spent nuclear fuel acceptance policy. The department's almost certain failure to be capable of accepting commercial spent fuel in 1998, as required by the Nuclear Waste Policy Act, has sparked public debate and prompted utilities and state agencies across the country to sue DOE for breach of contract.

Dreyfus' remarks appeared to coincide with discussion among NARUC commissioners during the Reno convention concerning actions they expect Congress to take on nuclear waste issues.

A copy of the draft resolution obtained by NWN outlines legislative changes to the Nuclear Waste Policy Act commissioners expect the 104th Congress to consider when it convenes in January.

The resolution focuses on four major areas of concern to utility ratepayers: 1) DOE's obligation to accept utility spent fuel by 1998 under the Nuclear Waste Policy Act; 2) interim high- level waste storage capability; 3) the department's nuclear waste program; and 4) fundamental improvements in DOE's nuclear waste program.

NARUC commissioners based the draft resolution on Section 302 of the Nuclear Waste Policy Act, which states the Secretary of Energy "shall take possession of and remove high-level radioactive waste and spent nuclear fuel in accordance with the acceptance priority ranking as required by the contracts (with utilities) entered into pursuant Section 302," the draft resolution says. Interim Storage

To ensure progress on the timely construction of a Monitored Retrievable Storage (MRS) facility, Congress should take control of the interim storage program, commissioners contend. Under their draft resolution, Congress should:

* Designate an above-ground, centralized, interim storage facility by June 30, 1995;

* Remove any connections involving licensing or location between an interim storage facility and a permanent repository;

* Set milestones and a DOE schedule for licensing and construction of the MRS, transportation infrastructure, multipurpose canisters and other shipping- and storage-related equipment that would speed acceptance by Jan. 31, 1998 (Congress also should authorize actions necessary to meet those milestones and override all legislative and regulatory obstacles that do not compromise safety and environmental factors);

* Direct DOE to develop needed infrastructure and equipment to speed spent fuel acceptance from reactors and set statutory ca- pacity limits on the MRS to accommodate actual storage needs;

* Allow private efforts to construct an MRS to proceed and reauthorize the U.S. Nuclear Waste Negotiator's office which expires Jan. 21, 1995. Program Funding

The draft resolution calls for several changes to the Nuclear Waste Fund, established under the Nuclear Waste Policy Act. It calls on Congress to:

* Exempt the Nuclear Waste Fund from any budgetary enforcement procedures under current federal budget laws.
* Continue to keep the fund subject to congressional appropriations;
* Make all ratepayer funds available to the federal nuclear waste program as needed, including those in the unobligated balance of the Nuclear Waste Fund;
* Keep the program fee at 1 mill per kilowatt hour.
* Assure a "fair share" of the cost of defense waste disposal is promptly determined and that: 1) all past debts are promptly made to the Nuclear Waste Fund, and 2) full payment of defense portions is made annually in the future (ensuring ratepayers play a "prominent" role in determining what constitutes a fair share). Program Improvement

The draft resolution recommends a number of changes to DOE's oversight of the nation's nuclear waste program and the department's activities at Yucca Mountain, Nev., to construct a candidate high-level waste repository. The draft resolution, calls on Congress to:

* Improve the efficiency of the repository licensing process without compromising health, safety or environmental factors while allowing repository emplacement of high-level waste for at least 100 years. The duration should be renewable for additional periods so that the repository can be "efficiently, safely and realistically utilized." The waste also should remain retrievable during at least the initial period and until it has been determined that the repository should be closed.
* Encourage greater private-sector participation in implementing aspects of the nuclear waste program such as: management, implementation and development of the multipurpose container system; management, implementation and development of the centralized interim storage facility and transportation systems.
* Remove implementation authority and responsibility for the Civilian Radioactive Waste Management Program from DOE if after receiving congressional direction and financial support the department is unable to effectively meet its goals and milestones by June 30, 1997. In the event DOE is relieved of the program, the draft resolution recommends placing the program and ramifications of changeover in the hands of "a new single-purpose federally chartered corporation" so that there would be no delay in conducting and achieving the program's goals.

% A copy of NARUC's draft Resolution Regarding Guiding Principles for Legislative Changes to the Nuclear Waste Policy Act, 3 pp., is available through BPI DocuDial, No. 48-393.

Record -56
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02568966 DOE ISSUES MULTI-PURPOSE CANISTER EIS NOTICE OF INTENT Nuclear Waste News October 27, 1994 V. 14 NO. 40 ISSN: 0276-2897 WORD COUNT: 651

The Department of Energy (DOE) is considering using multi- purpose canisters (MPCs) to store high-level radioactive waste (HLW) from commercial utilities until a permanent, high-level waste repository is completed.

DOE announced its Notice of Intent to Prepare an Environmental Impact Statement for the Fabrication and Deployment of a Multi- Purpose Canister Based System for the Management of Civilian Spent Nuclear Fuel Oct. 24. The scoping period for the proposed EIS continues through Jan. 6, 1995.

The MPC proposed by the department is a cylindrical shell with two lids, a spent fuel basket and a shield plug. The spent fuel basket provides structural support for spent fuel assemblies and a path for heat generated by the spent fuel to be transferred into the canister shell. The spent fuel basket also would provide criticality control. One-Time Handling

If MPCs are determined a viable interim storage option, spent fuel assemblies could be loaded into canisters sealed at reactor sites and "stored, transported and disposed of without repackaging or further handling of bare spent nuclear fuel," the notice said.

The department will hold three public scoping meetings around the country beginning Nov. 21 in Las Vegas. During the meetings officials will describe the proposed MPC system, EIS procedure and the scoping process and informational workshop and public scoping formats.

Informational workshops will focus on MPC design parameters and fabrication; storage at reactor sites and at other possible storage facilities; transportation; and, surface handling at a geologic repository in preparation for disposal.

As proposed in the EIS, DOE would fabricate and deploy the following:

* canisters capable of holding multiple spent fuel rods;
* specialized handling and welding equipment;
* transfer casks that would shield the canisters during loading into on-site storage casks;
* storage casks for sealed canisters;
* rail transportation casks; and,
* equipment required to manufacture MPCs.

Department officials will analyze the environmental impacts of MPCs, paying particular attention to: 1) manufacture of canister components; 2) packaging and handling of spent fuel as it is transferred to containers; 3) canister transfer and loading; 4) storing spent fuel in canisters and casks at reactor sites; 5) transporting spent fuel from reactor sites to a hypothetical monitored retrievable storage facility and/or geologic repository; 6) spent fuel handling and storage at a hypothetical monitored retrievable storage facility; 7) surface activities involving spent fuel handling and disposal at a geologic repository.

The proposed EIS will not address underground emplacement and post-closure impacts at a geologic repository since DOE does not have site characterization data for such a facility. Options and Alternatives

DOE officials will consider two conceptual design sizes for the MPCs. The first proposes a large capacity canister with a 125-ton crane hook weight limit and capacity to store 21 pressurized water reactor assemblies or 40 boiling water reactor fuel assemblies.

The second would meet a 75-ton crane weight limit with a capacity of 12 pressurized water reactor assemblies or 24 boiling water reactor assemblies.

Three alternative measures department officials offer to the proposed EIS include: 1) no action; 2) DOE would fabricate a new- high capacity rail transportation cask; and, 3) DOE would develop dual-purpose transportable storage casks.

Under the no action alternative, utilities would store spent fuel rods in non -standardized single-purpose, dry storage casks currently being used and proposed for use by some utilities.

DOE would supplement current dry storage casks with a new high- capacity rail transportation cask under the second alternative. The department would study the use of rail transport in an effort to reduce the number of fuel shipments transported via the nation's interstates.

The dual-purpose cask proposed under the third alternative, could be used in place of rail transport storage casks. Utilities would place spent fuel rods in a sealed, legal-weight-truck casks that could be used for either dry storage or as a substitute for rail transport casks.
% DOE's Oct. 24 Notice of Intent, 7 pp., may be purchased through BPI DocuDial, No. 48-341.

Record -57
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02561637 STATES WATCH FOREIGN SF SHIPMENT LAWSUIT Nuclear Waste News October 20, 1994 V. 14 NO. 40 ISSN: 0276-2897 WORD COUNT: 1015

Several states are watching closely as South Carolina escalates its fight to prevent the Department of Energy (DOE) from storing spent nuclear fuel shipments from foreign research reactors at DOE's Savannah River Site (SRS) in Aiken, S.C.

On Sept. 9, South Carolina officials sued DOE over its plan to store 409 spent fuel rods from eight foreign research reactors at SRS. In a surprise ruling by a federal district judge Sept. 13, the state got a temporary injunction barring transport of 153 spent fuel rods from research reactors in Austria, Denmark, Sweden and the Netherlands to the United States (NWN, Sept. 15, p. 355). States Watching Carefully

"Our state is unique with the Savannah River Site," South Carolina Attorney General Travis Metlock told NWN. "I would expect (other) states will be very much interested in the outcome."

Attorneys general from around the country are studying carefully the David vs. Goliath battle between South Carolina Gov. Carroll Campbell (D) and the federal government.

While some view the lawsuit as an example of a small state trying to defend itself against environmental hazards imposed by Washington bureaucrats, others contend South Carolina, a state that has reaped economic benefits from federal nuclear facilities, is biting the hand that feeds it.

"The proposed receipt and storage of 409 spent fuel elements at the Savannah River Site would result in extremely small increases in radiological emissions and waste generation at the site," DOE concluded in its April Environmental Assessment of Urgent-Relief Acceptance of Foreign Research Reactor Spent Nuclear Fuel.

DOE is preparing an Environmental Impact Statement (EIS) on providing "urgent relief" to foreign research reactor operators who are running out of storage capacity for the spent fuel they generate (NWN, Sept. 29, pp. 375-376).

DOE released a Notice of Intent for the EIS in October 1993. A Record of decision for the EIS is due in June 1995.

The EIS will study the possibility of storing 10,000 to 15,000 spent fuel rods from abroad at two additional DOE sites, the Idaho National Engineering Laboratory (INEL) in Idaho Falls and at the Hanford site in Richland, Wash. The department is studying dry storage options for the spent fuel at both sites.

No state, however, should be required to accept further spent fuel shipments, foreign or domestic, "until DOE has analyzed a full and comprehensive list of alternatives" for storage of the spent fuel, said Steve Hill, administrator of the State of Idaho's oversight program monitoring DOE's Idaho National Engineering Laboratory.

The department must convince the states it intends to comply with the National Environmental Policy Act (NEPA), Hill said, and prove it is willing to "do NEPA right."

"We're very much alerted to this. We oppose the segmentation of the foreign fuels study from the overall programmatic study - we oppose the urgent relief," Hill said. States Already Store Their 'Fair Share'

Idaho is storing its share of transuranic waste for the nation and is "still waiting for WIPP (DOE's Waste Isolation Pilot Plant in Carlsbad, N.M.) to open," Hill said. "DOE has some obligations and they haven't fulfilled those. We don't want to be a disposal site."

Washington State officials echo Hill's sentiments. "Washington has one-half the nation's defense waste in terms of volume on-site right now," said Joe Stohr, nuclear waste program manager for the state's Department of Ecology.

"Is it fair for the state to take on more (nuclear waste)? We're watching the (South Carolina) suit closely," Stohr said. National Forum Needed

Whether other states hosting DOE sites should be asked to store additional high-level radioactive waste, according to Stohr, is a question the department needs to raise in a national forum.

"Washington's reaction on this would be one of wanting to discuss federal, collective responsibility - what would be fair and equitable for our states - the benefits derived from these programs," Stohr said.

Further, Stohr would like DOE officials to be upfront about who "accrues" the most benefits from the urgent relief spent fuel acceptance and "who ends up suffering the costs."

Both Washington and Idaho officials have had an opportunity to give DOE officials input on the department's upcoming EIS through the public scoping process. Idaho mailed its scoping comments in December 1993 and gave oral testimony Nov. 9, Hill said.

Candor on the part of state officials can go a long way toward ensuring both DOE and the states get their positions across. According to one key department official, it behooves the states to participate in the administrate process.

The states will have another opportunity to comment on DOE's proposals involving urgent relief acceptance once DOE has issued a draft EIS.

Both Hill and Metlock point to Idaho Gov. Cecil Andrus' (D) 1991 battle to prevent department officials from shipping spent fuel from Colorado's Fort St. Vrain reactor, located near Plattesville, to INEL.

For nearly a year, Andrus succeeded in halting the spent fuel shipments by suing DOE. When the injunction was lifted later that year, Public Service Co. of Colorado, Fort St. Vrain's owner, managed to ship a small amount of the plant's spent fuel to INEL before Andrus again received an emergency stay by the U.S. District Court blocking further shipments to Idaho.

Public Service, as a result, was forced to construct a $25 million on-site, interim-storage facility where it has housed spent fuel since early 1992.

Public Service has a contract with DOE to eventually ship Fort St. Vrain's spent fuel to INEL. Several lingering issues, such as redesigning a new shipping cask for the spent fuel, still must be resolved before the company is allowed to ship the fuel.

While many watch the outcome of South Carolina's lawsuit against DOE, South Carolina officials hope to glean lessons from Andrus' ongoing court battles. "Their case helps us," said Ken Woodington, South Carolina's senior assistant attorney general. The two lawsuits are similar because, in both cases, DOE is trying to "improperly split off some of its shipments," he said.

South Carolina officials will continue their fight to block the remaining foreign spent fuel shipments in federal district court Nov. 1.

Record -58
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02554585 GAO URGES INDEPENDENT REVIEW OF YUCCA MOUNTAIN HLW PROGRAM Nuclear Waste News October 13, 1994 V. 14 NO. 39 ISSN: 0276-2897 WORD COUNT: 699

An outside, independent review of the Department of Energy's (DOE) nuclear waste disposal program could go a long way toward improving the pace, direction and enormous costs of constructing DOE's candidate nuclear waste repository site at Yucca Mountain, Nev., according to investigators from the General Accounting Office (GAO).

In its report, Nuclear Waste: Comprehensive Review of the Disposal Program Is Needed, GAO concluded congressional and public concern about whether Yucca Mountain, once completed, will be selected as the site to store the nation's high-level radioactive waste is growing. It added, the possibility of more money going to fund a project with a Record of cost-overruns and mismanagement, makes "a comprehensive review of key policy issues ... more critical now than before."

DOE officials, however, fear an independent review could slow down vital site -investigation work at Yucca Mountain. According to the report, Daniel Dreyfus, director of DOE's Office of Civilian Radioactive Waste Management (OCRWM) stressed to GAO investigators the importance of not allowing such a review to affect site- investigation activities.

GAO officials appear to favor a review of the department's work at Yucca Mountain by an independent board such as the Nuclear Waste Technical Review Board. The board, according to the report, has concluded it could carry out an independent, comprehensive review of DOE's nuclear waste disposal program focusing on policy issues while allowing Yucca Mountain site-investigation activities to proceed.

The report criticizes DOE's efforts to address public utilities' concerns about at-reactor storage of spent fuel beyond 1998, the date department officials initially set as the completion date for the federal, permanent high-level waste repository.

Last May, DOE officials issued a Notice of Inquiry (NOI) seeking input from utilities regarding the department's view that it is not obligated to begin accepting spent nuclear fuel in 1998 in the absence of the repository (NWN, Oct. 6, p. 389).

DOE officials expect the NOI to help them form long-range policy options for spent fuel storage and disposal. But GAO officials are concerned the NOI may not go far enough to generate "a full range of potential interim storage options."

The scope of the notice, however, according to the report, is not broad enough because it only addresses waste storage options that rely on government cost-sharing.

Further, the report is critical of DOE's proposal to use multi- purpose canisters as an interim storage method until a permanent repository is available. GAO officials contend the canisters pose "economic and safety risks" in the absence of further investigation of the Yucca Mountain site. The site, they argue, should be completed "before a disposal container can be developed with reasonable assurance that the waste will be safely disposed of."

"If DOE develops the multipurpose container system as planned, at least one part of the system - the disposal component - may not be acceptable for its intended purpose," the report says. As a result, DOE could be forced to spend more money reworking the containers to make them compatible with the repository once it is completed or develop a barrier system that would solve the problem or accept certain safety risks, the report says.

While DOE officials do not dispute GAO's findings, they are proceeding with their work at Yucca Mountain. "We anticipate Congress will address many of the policy issues raised in this report shortly," said OCRWM's deputy director, Lake Barrett.

"Several bills focusing on the waste management program have already been submitted. This is a national program that does not act alone in a vacuum, and balance, sophistication, and objectivity will be needed by all parties involved to solve these issues," Barrett said.

GREENLAND: Energy Secretary Hazel O'Leary has declassified more than 300 documents relating to the Jan. 21, 1968, crash near Thule, Greenland, of a B -52 carrying four unarmed nuclear weapons. The conventional high-explosives portion of the weapons detonated on impact when the bomber crashed and burned, throwing plutonium and tritium into the environment. The United States, in cooperation with the Danish government, conducted an extensive cleanup of the crash site. Anyone interested in obtaining

the documents should contact: Martha De Marr, Coordination and Information Center, Nevada Operations Office, Department of Energy, P.O. Box 98518, Las Vegas, NV 89193 -8513, (702) 295-0748.

Record -59
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02538889 DOE: MPC MOST COST-EFFECTIVE MULTI-PURPOSE SF SYSTEM Nuclear Waste News September 22, 1994 V. 14 NO. 36 ISSN: 0276-2897 WORD COUNT: 718

The multi-purpose canister (MPC) won out over several alternate concepts the Department of Energy considered for civilian spent fuel transportation, storage and disposal largely because it was able to provide all three functions at a reduced cost.

DOE's Office of Civilian Radioactive Waste Management (OCRWM) summarized its evaluation of the MPC and other systems, including a dual-purpose transportable storage cask and a multi-purpose unit, in its Sept. 1 report, Multi-Purpose Canister Evaluation: A Systems Engineering Approach.

OCRWM evaluated all systems in relation to an individual spent nuclear fuel (SF) handling system that provides for handling individual, uncanistered SF assemblies throughout the storage and transportation phases of the department's Civilian Radioactive Waste Management System (CRWMS). Factors considered in the evaluations were health and safety, environmental impacts, life cycle cost, schedule, technical feasibility, regulatory issues and stakeholder acceptance.

Systems engineering methods were used to develop alternatives to the point where they could be evaluated against the measures of effectiveness. The approach began by performing functional analyses, defining overall system requirements and developing a CRWMS concept for SF handling. Operating concepts and interfaces were defined and assigned to elements within each concept. These were used to develop conceptual designs for each alternative. Systems studies and analyses were performed to evaluate each alternative conceptual design.

OCRWM developed operational concepts for handling spent fuel at nuclear power plants and other sources of spent nuclear fuel, transporting SF, and operating a monitored retrievable storage (MRS) facility and a repository or mined geologic disposal system.

Logistics requirements were defined. DOE reviewed the capacity of nuclear plants to handle and transport SF casks. Also, the effects of not providing an MRS were considered in developing operational concepts and logistics requirements.

OCRWM evaluated two sizes of MPC - a large, 125-ton version and a small, 75 -ton version. The large version would hold either 21 pressurized water reactor (PWR) assemblies or 40 boiling water reactor (BWR) assemblies. The small MPC holds either 12 PWR assemblies or 24 BWR assemblies. Burnup credit is taken in the design of the large PWR canister.

The assemblies will remain in the sealed MPC throughout all storage, transportation and disposal activities. Separate overpacks will be provided for different activities. At the repository, the MPCs will be transferred from transportation casks to disposal containers to form waste packages for emplacement in the repository. Versatility Sought

DOE is trying to find ways to use MPCs at as many nuclear plants as possible in order to minimize the number of facilities that will have to ship individual, uncanistered SF assemblies in truck casks.

The system may include a bare SF transfer system that would allow the MPC to be loaded outside of a power plant's spent fuel pool with the aid of a special transfer cask. This would permit use of MPCs at plants that otherwise could not use them due to fuel pool lifting restrictions, site transportation limitations or other reasons.

Two sizes of metal dual-purpose transportable storage casks also were investigated - a 100-ton cask and a 75-ton cask. For the purpose of comparison, these sizes were selected to provide the same handling capacity as the MPCs designs. The large dual-purpose casks would accommodate 21 PWR assemblies or 40 BWR assemblies; the small cask would accommodate 12 PWR assemblies or 24 BWR assemblies.

OCRWM also investigated a dual-purpose canister system removable from the overpack. Fuel assemblies would be loaded into the dual-purpose casks for storage and transportation. However, once the casks were shipped to the repository, the assemblies would be transferred into a separate waste package for disposal. Several commercial applications of these concept are being developed.

The multi-purpose unit is a single universal cask designed for all three functions - storage, transportation and disposal. Additional overpacks are needed, except for a neutron shield used during transportation. Again, two sizes were designed, corresponding with the capacity of the MPC - a 125-ton cask able to

hold 21 PWR assemblies or 40 BWR assemblies and a 90-ton cask able to hold 12 PWR assemblies or 24 BWR assemblies.

In the conceptual design of all alternatives, OCRWM determined that the following plant site transportation capabilities can be accommodated: large, rail-transported containers could be shipped from 88 facilities; small rail -transported containers could be shipped from 14 facilities; and individual, uncanistered assemblies could be shipped by truck from 19 facilities.

Record -60
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02537170 SLANTS & TRENDS:FUEL-O-PHOBIA? Nuclear Waste News September 15, 1994 V. 14 NO. 36 ISSN: 0276-2897
WORD COUNT: 523

South Carolina Gov. Carroll Campbell decided to bite the bullet and sue the Department of Energy (DOE) over the U.S. fuel being returned to United States as foreign spent nuclear fuel (see story, p. 355). The fuel was used to power eight research reactors in seven Western European countries and is slated for storage at DOE's Savannah River Site near Aiken, S.C. "They do not need to bring this waste to the United States," Campbell said in a Sept. 9 statement. "These countries are all stable allies and DOE has admitted that the foreign reactors are fully capable of storing their own fuel safely." But department officials contend that by returning the waste to the United States they are preventing the spread of nuclear weapons and reducing the amount of weapons -grade uranium commerce in Western Europe. Until a 1988 change in U.S. policy banning the reprocessing of spent fuel the department has shipped spent fuel from foreign reactors to Savannah River for reprocessing.

The Clinton administration appears to be spoiling for a fight with its decision to take back the fuel in view of its stance against both domestic and foreign spent fuel reprocessing. While DOE claims nuclear nonproliferation is the sole issue at stake, the department can expect a fair amount of resentment from states asked to accept the fuel from overseas as long as a high-level radioactive waste repository remains merely a gleam in the eyes of department officials.

MORE FUEL-O-PHOBIA? ... The State of South Carolina is not the only entity protesting the return of nuclear fuel as nuclear waste from abroad. Several groups are calling on France, Japan and the United States to complete an environmental assessment for a shipment of vitrified, high-level radioactive waste scheduled to sail from France to Japan in February 1995. The waste, originally nuclear fuel from Japan, was reprocessed in France and will be returned to Japan for disposal. The groups argue that Japan, as both "shipper and receiver" of the waste, should be required to "consult with and receive the views of en-route countries on potential harm and emergency planning" and explain why the shipments are necessary, according to a statement released Sept. 14 by the Nuclear Control Institute.

ROMANCING THE ORE: The number of stories about life during the Cold War is blossoming as the United States takes a look back on what was created, and now must be destroyed, by an all-consuming bid to win the Cold War. Just as weapons research and manufacturing systems are being decommissioned, so too are some communities that thrived on the Cold War and the country's almost frantic search for fissile materials with which to ward off Soviet attack. Although now dead, towns like Colorado's Uravan - formed from the words uranium and vanadium - are attracting the attention of creative writers looking to romanticize the "good old days" of the Manhattan Project and the four-decade arms race. When examining the parallel between the weapons industry and the communities that were created, thrived and are now being destroyed, we are tempted to ask: "Exactly how broad should we make the definition of nuclear waste?"

Record -61
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02537166 JUSTICE DEPARTMENT FILES MOTION TO DISMISS UTILITY SUIT AGAINST DOE Nuclear Waste News September 15, 1994 V. 14 NO. 36 ISSN: 0276-2897 WORD COUNT: 437

The U.S. Circuit Court of Appeals for the District of Columbia is considering a request to dismiss a consolidated lawsuit against the Department of Energy (DOE) over the department's failure to complete construction of a federal high-level radioactive waste repository by 1998.

The suits at issue, Northern States Power Co. (NSP) vs. U.S. Department of Energy, et al (Docket No. #941457) and State of Michigan vs. U.S. Department of Energy, et al (Docket No. #941458), were brought in June by NSP and 14 other utilities, as well as public service commissioners and attorneys general in 20 states (NWN June 23, p. 245).

Utilities so far have contributed approximately $10 billion to the federal Nuclear Waste Fund, anticipating DOE would begin accepting their spent fuel in 1998. The department originally set that year as the completion date for a permanent repository.

The motion, filed Sept. 6 by Justice Department attorney John Bryson, dismissed the utilities' complaint as a "quarrel with the pace and manner" of the department's administrative process. Under the 1982 Nuclear Waste Policy Act, Bryson argued, the department has no legal obligation to accept utilities' spent fuel in 1998 in the absence of a federal repository.

Further, because the 1998 deadline is still three years away, DOE has not failed to deliver on its commitment to begin accepting the utilities' spent fuel, Bryson said. "Administrative actions and decisions are not final unless and until they impose an obligation, deny a right, or fix some legal relationship as a consummation of the administrative process.'"

DOE's argument turns on the following points:

* The court should dismiss the lawsuit because the utilities are not, in fact, challenging a final action of the department;

* Because the department has not "formalized" its waste acceptance decision, the utilities claim is abstract and not ripe for judicial review (i.e., the ripeness doctrine, Bryson argues, "prevents the courts ... from entangling themselves in abstract disagreements over administrative policies ... and protect(s) the agencies from judicial interference until an administrative decision has been formalized and its effects felt in a concrete way by the challenging parties.");

* The utilities' claim does not have standing under the U.S. Constitution because the utilities have not "suffered" any concrete consequences. Furthermore, their anticipated lack of spent fuel storage capacity is, at this point, "conjectural" and "hypothetical."

The utilities have until Sept. 26 to respond to the Justice Department's motion to dismiss.

A copy of the Justice Department's Sept. 6 motion to dismiss, 29 pp., is available through BPI DocuDial #48-187. DOE Exhibits accompanying the Sept. 6 motion, 16 pp., is available through BPI DocuDial #48-188.

Record -62
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02535952 GAO REPORT PUTS NUCLEAR WASTE PROGRAMS ABROAD AHEAD OF U.S. Nuclear Waste News September 8, 1994 V. 14 NO. 35 ISSN: 0276-2897 WORD COUNT: 323

If U.S. nuclear utilities were given more responsibility for the disposal of their radioactive waste, the United States probably would have a better nuclear waste disposal program, officials from the General Accounting Office (GAO) say.

A more active role for waste producers in the nation's high- level radioactive waste disposal program could lead to "better managerial and financial accountability of the program," GAO officials concluded in a report released last month titled, Nuclear Waste: Foreign Countries' Approach to High-Level Waste Storage and Disposal.

The report identified several areas in which foreign countries differ from the United States in their approach to managing nuclear waste. "Regardless of their ownership," the report says, "the nuclear utilities generally participate heavily in their nation's waste management program."

Foreign governments tend to oversee their waste management programs through regulatory agencies "that ultimately license, or advise their government on licensing, nuclear waste facilities," according to GAO.

The study also found that foreign governments appear to have been more successful in separating long-term waste disposal and temporary waste storage issues than the U.S. government.

Because they are able to keep these issues separate, waste producers in other countries are not given unrealistic schedules or false hopes about the completion of high-level waste repositories for permanent disposal.

The report does concede, however, that "various factors have allowed waste managers in other countries to separate waste storage and disposal issues."

Those factors include: the ability of waste producers abroad to reprocess their spent fuel and store their waste at reprocessing plants; significantly smaller nuclear power programs abroad than in the United States; and, other countries' ability to focus on a repository development schedule since they are not concerned with having to begin removing waste from power plants or other temporary storage facilities, the report says.

% A copy of the GAO report, Nuclear Waste: Foreign Countries' Approaches to High-Level Waste Storage and Disposal, 60 pp., is available through BPI DocuDial #48-166.

Record -63
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02489563 DEBATE FLAIRS OVER ROLE OF LEGISLATION IN FEDERAL NUCLEAR WASTE PROGRAM Nuclear Waste News August 8, 1994 V. 14 NO. 31 ISSN: 0276-2897 WORD COUNT: 665

Many concede drastic changes are needed to make the federal government's high -level nuclear waste program effective, but experts are divided on whether more legislation is required.

Rep. Phil Sharp, the Indiana Democrat who chairs the House Energy and Power subcommittee, called an Aug. 3 hearing to assess the federal government's high-level radioactive waste storage and disposal efforts. Committee members wasted little time expressing their dissatisfaction with Department of Energy (DOE) attempts to site a permanent high-level waste repository.

"The U.S. nuclear program is a failure," said Nevada Democratic Sen. Richard Bryan, the first to offer remarks on the status of the program. In Nevada, candidate for the planned storage site, DOE has a reputation for poor judgment, breaking promises and limited public involvement in the goals of its nuclear waste program, Bryan said.

Independent Review Of Program Needed

Rep. James Bilbray, another Nevada Democrat, also criticized the department's handling of the nuclear waste program and specifically attacked DOE's site characterization of Yucca Mountain, Nev.

"Science must no longer take a back seat to unrealistic deadlines if a credible nuclear waste program is to be developed," Bilbray said.

Bilbray urged subcommittee members to join him, other House and Senate members, and several public interest groups in "calling for a presidential commission to conduct an independent, comprehensive review of the civilian radioactive waste program."

Bilbray also cautioned subcommittee members against voting for legislative proposals "that seek to diminish Congress' oversight role in the nuclear waste program or to relax health and safety standards for Yucca Mountain."

But Daniel Dreyfus, director of DOE's Office of Civilian Radioactive Waste Management, defended the Clinton administration's efforts regarding the federal high-level waste program.

There are no quick fixes to the high-level waste management problem, Dreyfus said. The Administration has given waste management and disposal issues a high priority, he said.

"The (waste disposal) program intends to carry out its mission in a way that will assure public health and safety, protect the environment, foster public confidence and be economically viable," Dreyfus said.

Timeliness, cost-effectiveness, management oversight and continuity are all concerns that must be addressed regarding the federal disposal program, according to Krista Sanda, commissioner of the Minnesota Department of Public Service.

Sanda, who also is the founder of the Nuclear Waste Strategy Coalition, identified herself as the "instigator" behind the commercial utilities lawsuit against DOE for its failure to accept their spent nuclear fuel by 1998 as promised under the Nuclear Waste Policy Act (NWN June 23, p. 245).

"Legislation is needed to correct the problems and flaws in the federal program and ensure that the nation secures safe, timely and cost-effective storage and disposal facilities," Sanda said.

The Nuclear Waste Strategy Coalition, she said, is in the process of drafting a legislative proposal to address those flaws Sanda expects to be introduced when Congress meets next session. No More Help from Washington

However, Miller Hudson, spokesman for the Mescalero-Apache Nation of New Mexico argued legislative changes to develop a Monitored Retrievable Storage (MRS) facility for interim spent fuel storage are more likely to hurt the private MRS venture currently underway between the Mescaleros and a number of commercial utilities from across the country.

"We have been assured by the Nuclear Regulatory Commission as well as our own attorneys that no changes are needed, Hudson said. "If Congress does nothing, absolutely nothing, we can license this project."

"I recognize this may run counter to your instincts," Hudson told subcommittee members prompting an outbreak of laughter. Citing a number of botched attempts by the government to site a federal MRS, Hudson blamed politics for ultimately derailing the government's process.

"Let me be blunt," Hudson said. "We are concerned that Washington will try and help us. Our experience in this regard has been very poor. I would like to put you on notice today ... the Mescalero Tribal Council

will vigorously oppose any legislation designed to prevent the tribe and our utility partners from constructing a private spent fuel storage facility."

Record -64
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02489557 IAEA TEAM GIVES THUMBS UP TO FINLAND'S HLW PROGRAM Nuclear Waste News August 8, 1994 V. 14 NO. 31 ISSN: 0276-2897 WORD COUNT: 190

After a year-long technical review, International Atomic Energy Agency (IAEA) experts have applauded Finland's high-level radioactive waste management program.

The review was conducted under IAEA's radioactive waste management assessment and technical review program (WATRP) in response to a request from the Finnish government.

The IAEA team of experts from Belgium, Canada, Germany, Switzerland and IAEA's Vienna offices reviewed work being done to site and build a conditioning facility for spent nuclear fuel; siting and construction of a repository; and the plans and activities for the conditioning and disposal of waste from decommissioning Finland's reactors when that becomes necessary in the future.

The review team noted that, while Finland's nuclear power program is quite young, the country has had notable success in developing its radioactive waste management technologies and its capabilities to achieve a complete and sound storage and disposal system.

Finnish scientists participate in many international working groups and committees, both contributing to the international understanding of the subject and obtaining knowledge they can apply to the Finnish program, the IAEA team said.

The international reviewers expressed approval of the high quality of work being done in the Finnish program.

Record -65
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02489556 IAEA TOUTS ADVANTAGES OF REGIONAL NUCLEAR WASTE DISPOSAL FACILITY Nuclear Waste News August 8, 1994 V. 14 NO. 31 ISSN: 0276-2897 WORD COUNT: 545

The relatively small size of the nuclear power programs in most Eastern European countries does not justify the construction of separate waste disposal sites. A regional facility instead should be considered, according to a recent International Atomic Energy Agency (IAEA) report.

The IAEA report on waste management in Central and Eastern Europe argues that the cost of constructing a central nuclear waste storage facility would have an economic advantage for the cash-strapped states of the former East Bloc. In addition to financial considerations, the IAEA report says there are also technical and safety reasons that support the regional repository concept.

"(I)t would be safer to keep a low number of disposal sites and it would be easier to control them," the report says. "One cannot argue that a half dozen disposal facilities are more environmentally benign, technically sound, economically advantageous, or safe than one regional facility." Regional Cooperation Sought

This most recent IAEA report stems from a project launched in 1991 to promote regional technical cooperation and identify waste management problems.

In compiling the report, the IAEA examined nuclear waste management strategies in Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia, and Croatia. These countries play host to 19 of the region's 66 nuclear power plants and another 11 are under construction.

In addition to nuclear power plants, a small amount of nuclear waste is being generated by the region's 2,000-odd facilities using radioactive materials, including hospitals, research facilities and industry. Problems Ahead

As in other countries with nuclear programs, the states of Eastern Europe will suffer growing problems storing spent nuclear fuel and other radioactive waste in coming years, IAEA says. Globally, the world's 430 nuclear power plants will have generated approximately 200,000 metric tons of spent fuel by 2000. Of that, only about 20 percent will be reprocessed into usable fuel, the IAEA report says.

Complicating the waste production problem is the fact several Eastern European countries are revamping their nuclear power programs - decommissioning old graphite-moderated reactors and constructing new facilities.

One example of now Eastern Europe is outstripping its storage capacity is in Bulgaria, where one six-reactor facility has nearly filled all of its liquid and solid waste storage facilities and must immediately begin looking for alternative sites.

The report notes that Soviet-designed reactors contain an average of 42 metric tons of nuclear fuel, one-third of which is replaced yearly.

At present, most nuclear waste is stored on site. The original rationale under Soviet leadership was to retain all nuclear waste at the source until it was time to decommission the facility. As decommissioning commenced, all radioactive materials, with the exception of very low level waste, could be transported together to a safe storage facility, the report says.

Russia traditionally has supplied much of the highly enriched uranium (HEU) used in Eastern Europe. In exchange, these countries shipped some of their spent fuel back to Russia for reprocessing in fast-breeder reactors. Today, Moscow insists on hard currency for its HEU and to receive spent fuel. As a result, the states of Eastern Europe are looking for new sources of fuel and to create their own reprocessing and storage facilities.

Contact: Donald Faire, International Atomic Energy Agency (IAEA), P.O. Box 100, Vienna International Center, A-1400, Vienna, Austria; 43-1-2360-2674.

Record -66
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02458692 SLANTS & TRENDS:VIVRE LA DIFFERENCE Nuclear Waste News July 21, 1994 V. 14 NO. 29 ISSN: 0276-2897 WORD COUNT: 466

A visiting delegation of French nuclear energy officials arrived in Washington, D.C., just in time to see the showdown between House and Senate conferees over funding for the Advanced Liquid Metal/Integral Fast Reactor. In an elaborate July 19 briefing at Nuclear Regulatory Commission headquarters, delegates proudly described how France has pursued spent fuel reprocessing. Paris believes it makes "good economic sense" (see story, p. 285).

Not so fast, said Chris Nichols, spokes-woman for the Safe Energy Communication Council in Washington, D.C. Many more energy options than nuclear power exist for U.S. utilities, she said. As for reprocessing, "we have a glut of uranium," Nichols argued. If, like the French, the utilities of this country used mixed oxide fuel, they would run into several technical problems, she said. By outlawing reprocessing and pursuing cheaper energy options, such as natural gas, "We are heading in a more prudent direction," she said. Jean-Louis Ricaud of French COGEMA Inc. disagreed, saying that with the world's reactors producing 50 tons of plutonium annually, "Recycling this resource would represent an electricity amount equivalent to up to 100 MTOEs per year, the oil production of Kuwait." * * *

Accountability: The recent seizure by authorities in Germany of a small amount of weapons-grade plutonium believed to have originated in a nuclear arms plant in Russia brings home a point that has been discussed peripherally throughout talks of dismantling the former-Soviet nuclear arsenal - how much weapons- grade plutonium is there? There has been little to no information on how many nuclear weapons, if any, have been dismantled and what is happening with the fissionable materials. Since only a small amount - about 20 to 60 pounds of weapons-grade plutonium - is needed to build a bomb, stringent accountability of this material should be required. Such accountability must include location and disposition of all fissionable materials, information on the number of weapons dismantled and remaining to be dismantled and assurances that appropriate security measures have been taken to safeguard the materials. This could be accomplished by requiring such accountability measures as a condition of economic aid packages or through pressure from the United Nations. * * *

EMERGENCY PREPAREDNESS: In an unusual demonstration of international cooperation, officials from seven countries gathered recently to examine ways of combating the accidental release of nuclear waste or radiation from a nuclear power plant. Delegates from Russia, Canada, Norway, Sweden, Finland, Denmark, the United States joined representatives from the International Atomic Energy Agency for a drill at the Alaska National Guard Armory near Fort Richardson to work on disaster management systems in the event of a nuclear accident in northern climes. Although not many people live in the Arctic, the drill was described as useful for building international emergency preparedness cooperation. Such preparations are extremely useful for preserving public trust in nuclear energy.

Record -67
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02458690 DELEGATION DESCRIBES FRENCH PROGRAM FOR REPROCESSING SPENT NUCLEAR FUEL Nuclear Waste News July 21, 1994 V. 14 NO. 29 ISSN: 0276-2897 WORD COUNT: 678

Nuclear utilities in the United States might have avoided their current spent nuclear fuel storage and disposal problems if the U.S. government had emulated the French in adopting a favorable position on plutonium and uranium reprocessing. That was the message of a visiting delegation of French nuclear energy officials invited to "brief" Nuclear Regulatory Commission (NRC) officials at a July 19 news conference.

The visiting delegation, composed of French government and nuclear industry representatives, discussed what they termed to be successful fuel cycle and radioactive waste management activities in that country. A Different Policy

NRC chairman Ivan Selin began the meeting by commending the French on their nuclear program, saying it offers "a great challenge to us (United States)." However, Selin stressed the fact that the French program is not one the commission is considering adopting as "a direct part of our domestic regulatory responsibilities."

France has 54 pressurized water reactors (PWRs) generating 60,000 megawatts, or more than 75 percent of the country's electricity, according to Claude Mendil, director general for energy and natural resources at the French Ministry of Industry. Ninety percent of the country's nuclear waste is short -lived, low- level radioactive waste, he said.

"Our use of plutonium in the nuclear power program is already a commercial reality that meets our needs in terms of natural resource conservation and environmental protection," Mendil said.

Reprocessing plutonium in France does not raise proliferation concerns, "because it is properly safeguarded by international organizations such as the International Atomic Energy Agency (IAEA)," Mendil told the NRC. Energy Independence Sought

Pointing to differences that exist between French energy policies and those of the United States, Medil said France has "virtually no fossil fuel policy" and owns 0.1 percent of the world's energy reserves, yet it's level of energy consumption represents 3 percent of the world's energy resources.

Because the French are more dependent on nuclear energy than Americans, there has been a growing interest in limiting energy dependency in France.

There also has been an emphasis on conservation and recycling in all areas of industry, according to Jean-Louis Ricaud, vice president of reprocessing for COGEMA Inc, the company appointed in 1976 to manage the country's nuclear power industry.

The French nuclear industry views reprocessing as "a resource management strategy to recover plutonium and uranium safely" and recycle them, Ricaud said. The country has received, as a result, "indisputable benefits" that have helped it "minimize the volume of final wastes to be disposed of and reduce the waste toxicity thus protecting the environment," he said.

France has two radioactive waste disposal facilities: the Centres de la Manche and de l'Aube. Both are operated by ANDRA, the French agency for radioactive waste management.

While the Centre de la Manche facility has recently reached its storage capacity limit, the Centre de l'Aube has enough capacity to "cover disposal requirements for the next forty years," Mendil said. Waste Recycling Plans

Like its American counterpart, the French nuclear industry finds management and storage of high-level waste among its toughest challenges.

A new plant scheduled to start up in 1995, is expected to bolster France's reprocessing of spent nuclear fuel. The Melox plant at Marcoule, "will be capable of fabricating 120 tons of mixed oxide (MOX) fuel from the 8 tons of plutonium" produced each year at the La Hague UP2-800 reprocessing plant, Mendil said.

"120 tons of MOX fuel corresponds to nearly 20 reloads. Six reactors are loaded with MOX fuel at the present time," Mendil said. The French anticipate 20 reactors being loaded with MOX fuel by the end of the decade, he said.

As a result, Mendil believes reprocessing and recycling of fissile materials may help to minimize the need for storage of spent nuclear fuel and long -lived radioactive waste.

But the French Parliament overwhelmingly passed a waste policy law requiring research into long-lived and high-level waste management. The Waste Act of December 30, 1991 requires the government to study and evaluate processing and storage of waste. The findings are to be presented to the French Parliament in 2006.

Record -68
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02430480 DOE PRESENTS SPENT FUEL STORAGE OPTIONS IN DRAFT IMPACT REPORT Nuclear Waste News June 30, 1994 V. 14 NO. 21 ISSN: 0276-2897 WORD COUNT: 622

The Department of Energy (DOE) is examining a range of options - including consolidation at one or two sites - for interim storage of spent reactor fuel from its weapons complex and research reactors.

The department June 23 released a two-volume draft environmental impact statement (EIS), in which DOE examined options both for department-wide spent nuclear fuel management and the environmental programs at the Idaho National Engineering Laboratory (INEL).

A portion of the document examined options for interim maintenance of spent U.S. Navy fuel, including possible storage at five U.S. naval bases. The draft EIS addressed only DOE and Navy spent fuel, not the 25,000-30,000 metric tons of civilian fuel stored at nuclear plants.

The draft EIS stemmed from a lawsuit filed by Idaho against INEL over transportation of Navy and DOE spent fuel to the installation. After considerable legal wrangling, a 9th Circuit Appeals Court decision allowed shipments to INEL to continue while DOE heeds a District Court order to prepare a full EIS (NWN, Jan. 6, p. 2).

DOE Assistant Secretary for Environmental Management Thomas Grumbly said the department decided to use the mandate as an opportunity to examine the storage issue system-wide as it prepares for eventual final disposition.

DOE offered no "preferred alternative" for either spent fuel management or environmental programs at INEL. Its choice will be identified in the final EIS next April. DOE will incorporate input from 20 public hearings between July 18 and early September. The public comment period ends Sept. 30. No alternative being considered presents significant environmental and health risk, Grumbly assured.

The department said there are five sites under consideration for storage of the over 2,675 metric tons of current and anticipated spent fuel over the next 40 years: the Hanford Site near Richland, Wash.; the Savannah River Site in Aiken, S.C.; the Oak Ridge, Tenn., reservation; the Nevada Test Site; and INEL.

DOE outlined five options for temporary storage of its spent fuel:

* No Action: Take minimum action necessary for safe spent fuel management at generation or storage locations;
* Decentralization: Store most spent fuel at or near generation or storage locations with some shipments of nongovernmental and university research fuel to DOE facilities;
* New Fuel Consolidation: Transport and store newly generated spent fuel at INEL or the Savannah River Site, leaving existing fuel at its current locations;
* Regionalization: Distribute existing and newly generated spent fuel among DOE facilities based either on fuel type or geographic location; and
* Centralization: Manage all existing and future DOE and Navy spent fuel at a single DOE facility. INEL Alternatives DOE also has selected a range of options to address the entire environmental restoration and waste management program at INEL. The alternatives each consider current and future sources and amounts of fuel that might be transported to INEL, practicality of environmental management methods and locations on and off INEL where spent fuel management could be undertaken.

The four alternatives outlined in Volume Two of the draft EIS consist of:

* A (No Action): DOE would complete near-term actions and continue operating most facilities. Serves as a benchmark for comparing other alternatives;
* B (Ten-Year Plan): Complete identified projects and begin projects in environmental restoration and waste management, spent fuel storage, preparation for final disposal, and development of disposal technologies;
* C (Minimum Treatment, Storage and Disposal): Minimize all activities including fuel receipt, conduct minimum cleanup, and transfer spent fuel and waste to other DOE sites; and
* D (Maximum Treatment, Storage and Disposal): Maximize all activities to accomodate waste and spent fuel from other DOE facilities, and conduct maximum cleanup.

The Navy did state a preferred alternative to continue its current practice of refueling and defueling nuclear-powered vessels and transporting fuel to INEL for interim storage.

Record -69
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02411292 NEGOTIATOR HAS DIFFERENT SPIN ON NUCLEAR WASTE ACCEPTANCE Nuclear Waste News May 26, 1994 V. 14 NO. 21 ISSN: 0276-2897 WORD COUNT: 605

Rather than allow opponents of nuclear waste storage to takethe moral high ground in the nuclear spent-fuel final dispositiondebate, the U.S. Nuclear Waste Negotiator Richard Stallings wantsto allow people to see the positive economic opportunitiesprovided by the need for nuclear waste storage. "We need a fundamental change in the way we look at nuclearwaste. We need to look at it as a resource with positive economicopportunities rather than a waste," Stallings told conferees May24 in a keynote luncheon address at the 5th Annual InternationalHigh-Level Radioactive Waste Management Conference & Exposition inLas Vegas.Planning For The Future With the Cold War over, Stallings sees nuclear waste as apotential economic package for areas affected bynational-laboratory and military base closures. Stallings lauded Indian nations such as the Mescalero ApacheTribe who have been working on a private enterprise storagefacility. Other tribes have shown interest in pursuing nuclearspent-fuel storage capability as a means of economic empowerment. "We are putting together packages that make it more feasible"to set up storage facilities, Stallings said. Attitudes havechanged since the Cold War, he added. Stallings said he intends to use his office as a means ofbuilding confidence in the public arena. "People fear what they don't understand. There is a tremendousamount of distrust concerning nuclear power and anythingrelated," Stallings told the conferees. When people hear the word nuclear they automatically think ofHiroshima, Three Mile Island and Chernobyl, he said, and "theydon't like it," he said. However, if the decision can be framed in terms of MagneticResonance Imagery, X-Rays and other forms of nuclear medicine,"then they want nuclear things," he said. "If a Fortune 500 company or Saturn wanted to set up a plant,the community would love it, even though there would be a wasteproduct," he said. In some cases, that waste might be more serious than the threatfrom a nuclear waste storage facility, considering the safeguards,he added.Unsympathetic Public Perception The task will be difficult, Stallings admitted. The nuclearindustry is not popular with many environmental groups, which havetraditionally used fear to drive negative views of things nuclearinto the public's perception, he said. These groups' ultimate goal is to disable and eventually haltthe nuclear industry, and they may have found a way to do so. By keeping the public wary through use of negative rhetoric onthe potential hazards of nuclear waste storage, a "not in my backyard" mentality takes hold, Stallings said. Such a mentality canslow, cripple or stop construction of needed waste storagefacilities. Nuclear power plants, meanwhile, must store their spent-fuelson-site in pools. Once these pools are filled and there is noplace to store the fuels, plants will be forced to shut down,Stallings said. While such events may meet the objectives of the environmentalgroups, there still would exist the problem of spent-fuel storage.Time Is Limited Stallings also faces the challenge of a very limited timeframein which to make his program work. The office of the Nuclear WasteNegotiator expires in 1995, he told conferees. "The office willshut down next January unless progress, significant progress, ismade." Stallings was selected last year by President Clinton for theposition and confirmed by the Senate. He is a former congressmanfrom Idaho's 2nd District, where the Idaho National EngineeringLaboratory (INEL) is located. He served at INEL from 1984 -1992. He became familiar with nuclear waste issues sitting on theHouse Science, Space and Technology Committee and by having INELin his district, he said. Stallings said he is not ashamed of his product and hopes tooffer economic opportunities to needy communities. But, ratherthan impose facilities on communities by governmental fiat, hewants his program to be voluntary. "A voluntary process is what this country is all about," hesaid.

Record -70
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02411291)GEOLOGIC DISPOSAL BEST OPTION FOR SPENT-FUEL, EXPERTS SAY Nuclear Waste News May 26, 1994 V. 14 NO. 21 ISSN: 0276-2897 WORD COUNT: 654

Skepticism of the nation's commitment to geologic disposal mayslow or halt progress in the final disposition of the nation'snuclear waste, Forrest Remick, Commissioner of the NuclearRegulatory Commission (NRC), told attendees of the 5th AnnualHigh-Level Radioactive Waste Management Conference and Exposition(HLRWM) plenary session in Las Vegas May 22. While federal officials agree that construction of anunderground nuclear waste repository is the only viable optionavailable and the only one that has received any kind of consensusin the scientific community, concerns linger in various circlesthat both the location and method chosen were ill-advised, hesaid.Solution Well-Considered "Some of these concerns may have their origin in a mistakennotion that the pursuit of geologic disposal of long -livedradioactive waste was a decision taken in haste, without dueconsideration, in order to bring about an expedient solution to adifficult problem," Remick said. "This, I assure you, is not thecase." The national commitment to geologic disposal is based onfairness and equity, Remick told the conferees. Those who benefitfrom the generation of electricity using nuclear fission mustassume the burden for disposing of it in a manner that willprotect future generations from hazards we would not accept forourselves, he said. Currently, the NRC's second Waste Confidence Decision of 1990,allows for storage of spent nuclear fuel on-site at a reactor foras many as 100 years. "It would seem inconsistent with our priorcommitment to national policy to condone storage of spent-fuelindefinitely," Remick said. Geologic disposal, however, may be more a public perceptionproblem than a feasibility problem, said the Department ofEnergy's (DOE) Daniel Dreyfus, director of DOE's Office ofCivilian Radioactive Waste Management, also speaking at theplenary session. There is a school of thought that says arepository solution should be abandoned in favor of on-sitestorage for the immediate future, he said. The nuclear power industry currently stores spent nuclear fuelin "pools" at the reactor site, but these pools are rapidlyfilling. Already six nuclear power plants have run out of room andare storing dry spent nuclear fuel outside the pools, said SteveCraft, chairman of the Nuclear Energy Institute, who spoke at alater session on multi-purpose containers (see related story, p.206). The Institute estimates that by the year 2010, similarconditions will exist at 81 nuclear power plants across thenation. In light of this and other demands for immediacy, keynotespeaker Jack Lemley, president of Lemley & Associates Inc., calledfor action. The problem, Lemley said, is in the lack ofempowerment at all levels of government. Lemley, an engineer, was involved in construction of theEnglish Channel Tunnel, a private enterprise initiative similar inscope to the Yucca Mountain proposal. "Public officials are nottruly empowered to make the timely, bold decisions necessary tomanage large public projects." Instead, they hide behind studies and expert opinions, of whichthere seems to be no dearth, he said. "I submit that when extendedanalysis is substituted for action, goals become unfocused,projects begin to drift," he said. "What is needed is decisions," Lemley pronounced. "Even ifthese decisions are less than perfect ... they move a projectforward." Most challenges facing the Yucca Mountain project specificallyand geologic disposal of radioactive waste generally do notpresent overly complicated engineering and scientific problems,Lemley said. These should not become "unbounded researchprograms," to search "for perfect solutions toengineering/construction situations that are currently workable,"he said.Strong Opposition Remains Nevertheless, there are those who are content to see no action.Nevada State Senate Minority Leader, Dina Titus (D-Las Vegas) hasled opposition to the Yucca Mountain project along with NevadaGovernor Bob Miller (D). Yucca Mountain, which would be constructed nearly 100 milesaway from Las Vegas in an area described as arid anduninhabitable, has come under local pressure as well as from U.S.Senators to stop development of the proposed repository. Nearly 70 percent of the state citizenry, according to Titus,is opposed to the Yucca Mountain project, though at the same time,many have indicated that if they are going to have the repository,they are interested in a serious set of benefits to accompany it.

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DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02358483 Mescaleros Find 35 Partners For Spent Fuel Storage Plan Nuclear Waste News April 21, 1994 V. 14 NO. 16 ISSN: 0276-2897
WORD COUNT: 297

Thirty-three utilities and two nuclear industry contractors have officially joined the initiative to establish a privately owned and operated spent fuel monitored retrievable storage facility on Mescalero tribal lands in New Mexico, the tribal council and its partner, the Minneapolis-based utility Northern States Power, said April 20.

Each of the utilities will have the opportunity to become an equity partner in the endeavor (NWN, April 7, 1994, p. 133).

The first phase is to determine by June 1 more detailed costs and schedules for the project. Once these estimates are complete, participants will decide whether to move to the second phase of the process. In phase two, a business entity with the Mescaleros as majority partner will be established.

At the end of phase two, the Mescaleros will have to approve the agreements that are reached for constructing and operating the facility.

Following tribal approval, the licensing process with the Nuclear Regulatory Commission will begin. The Mescaleros estimate obtaining a license will take approximately three to four years and will cost $8 million to $10 million. During the licensing process, an environmental impact state- ment will be developed.

The following companies have committed to phase one: American Electric Power, Arizona Public Service, Boston Edi- son, Carolina Power and Light, Centerior Energy, Commonwealth Edison, Consolidated Edison, Consumers Power, Dairyland Power, Detroit Edison, Duke Power Co., Duquesne Light Co., Entergy Operations, GPU Nuclear Corp., IES Utili- ties, Illinois Power, Morrison-Knudsen, Nebraska Public Power District, Niagara Mohawk, Northeast Utilities, Northern States Power Co., Omaha Public Power District, Pacific Gas and Electric, Pennsylvania Power and Light, PECO Energy Co., Portland General Electric, Public Service Electric and Gas, Rochester Gas and Electric, Southern California Edison, Southern Nuclear Operating Co., Transnuclear, Virginia Power, Wisconsin Electric Power, Wisconsin Public Service and Yankee Atomic Electric.

Record -72
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02348418 Mescaleros Prepare Business Plan for Private MRS Facility Nuclear Waste News April 7, 1994 V. 14 NO. 14 ISSN: 0276-2897
WORD COUNT: 624

Northern States Power Co. (NSP) and the Mescalero Apache Nation of New Mexico recently released a list of construction and operational goals they believe will be key to completing a privately owned Monitored Retrievable Storage (MRS) facility by 2001.

An executive business plan obtained by NWN highlights quarterly milestones NSP and the Mescaleros will use to guide them through completion of the MRS. Among other things, the plan stipulates the terms of facility use for utilities interested in joining, estimates implementation costs and describes storage capacity requirements.

While the plan indicates the project's corporate structure is still being studied, some of the characteristics of the MRS venture include:

* Majority ownership by the Mescaleros.
* A board of directors to represent equity holders and
* Possible indemnification by the Price-Anderson Act.

Completion of the MRS is contingent on the NSP's and the Mescaleros' ability to site and license the facility; agree on a design; finish construction and begin operation; ensure an adequate means of transporting the spent fuel that will be stored on the reservation; and, agree on a plan for site restoration.

Only Domestic Fuel Accepted

If the NSP and the Mescaleros receive an initial 20-year license from the Nuclear Regulatory Commission (NRC) and 20-year renewal for the MRS, it would operate independently of the Department of Energy (DOE) and would accept only domestic utility spent fuel.

Some assumptions involving MRS capacity and utilities' objectives are identified in the business plan:

* Storage capacity would be 10,000 metric tons uraniumequivalent (MTU) with an acceptance rate of 1,000 MTU/year, approximately 100 casks per year.
* Fuel would be moved to the MRS by rail, using rail transport casks with canistered fuel loaded by the utility.
* Fuel title/ownership would remain with the utilities.
* Full site restoration funding provisions would be established prior to operation.

Terms outlined in the plan governing agreements with utilities include:

* Utilities would pay a facility fee, an annual storage operations fee and a fee for site restoration. The storage price would include full recovery of costs.
* Utilities also would be charged financial penalties for failure to remove spent fuel once the contracted storage period expired. Under the plan, user fees would be based on need. For example, utilities paying the lowest fee, those presumably with the greatest need, would have the highest storage priority.

Conversely, utilities requesting storage after the April 1, 1994, commitment deadline would have the lowest priority. The fee structure is based on market pricing and limited capacity.

Four-Phase Action Plan The final part of the plan describes a four-phase "Action Plan" detailing steps NSP and the Mescaleros plan to take from now until June, 2001, the expected completion date. The action plan also provides a time line and cost estimates:

Phase One: March to June, 1994. Commitment deadline: April 1. Estimated cost is $60,000:

* Obtain utility commitments
* Establish planning team
* Complete business plan
* Establish allocation priorities
* Identify licenses and regulatory approvals
* Prepare detailed budget and schedules

Phase Two: June to October, 1994. Commitment deadline: June 1. Estimated cost is $360,000:

* Negotiate agreements among equity holders
* Prepare financial, technical and regulatory plans
* Negotiate preliminary commitments for financing
* Execute agreements among equity holders
* Ratification of agreements by Mescalero Apache Nation

* Establish legal entity
(Continued)
Mescalero MRS Plan (Cont.)
Phase Three: October, 1994 to June, 1996. Commitment deadline: October 3, 1994. Estimated cost is $8 million:
* Prepare and file NRC license application
* Implement public information plan
* Develop transportation plan
Phase Four: June, 1996 to September, 2001. No commitment deadline. Estimated cost is $66 million:
* Obtain NRC license and other regulatory approvals
* Initiate and complete construction
* Resolve challenges and appeals. % A summary of the Mescaleros' Private Fuel Storage Facility Business Plan, 18 pp., is available from BPI DocuDial, No. 1304.

Record -73
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02328959 HOUSE SUBCOMMITTEES GET COLD FEET ON MRS PROCESS Nuclear Waste News March 24, 1994 V. 14 NO. 12 ISSN: 0276-2897 WORD COUNT: 972

Lawmakers on Capitol Hill appear to have given up on construction of a federal Monitored Retrievable Storage (MRS) facility if a March 17 hearing is any indication of the program's standing in Congress.

The hearing was sponsored jointly by two House Natural Resources subcommittees, energy and mineral resources and oversight and investigations.

Although the hearing convened to assess the status of the MRS siting program, subcommittee members seemed more intent on protecting their districts from the siting process. With the exception of Rep. Bob Smith (R-Ore.), whose district includes a portion of the Ft. McDermitt Shoshone Paiutes Reservation, a tribe willing to host an MRS, subcommittee members made it clear they wanted their districts exempted.

'An Interesting Dilemma'

"We are in an interesting dilemma," Smith told his colleagues. "My friend from Nevada (Rep. Barbara Vucanovich (R-Nev.)) doesn't want it, but you (nuclear waste negotiator) want to put it there. I want it, but you don't want to put it in my state."

Rep. Joe Skeen (R-N.M.) was the first to denounce MRS siting negotiations in his district where the Mescalero Apache Nation is moving forward in a private MRS venture with Northern States Power, a Minnesota utility. The tribe plans to host the facility on its Mescalero, N.M., reservation and has invoked tribal sovereignty to prevent the state's opposing congressional delegation from obstructing the siting process. (See NWN, Feb. 10, p. 52).

Congress did the right thing last fall when it voted to cut off funding for MRS feasibility studies under a federal grant process, Skeen said. "Congress acted responsibly when it prohibited DOE (Department of Energy) from allocating funds in FY-94 to Indian tribes when it became clear these tribes were not receiving support from state and local officials," Skeen said.

"Congress intended to make it easier to construct an MRS by negotiating with Native Americans who are sovereign nations. Sovereignty is extremely important to Native Americans and the federal government should continue to respect it, but not at the exclusion of states' responsibilities," Skeen concluded.

The hearing's principal panel of witnesses included Nuclear Waste Negotiator Richard Stallings; Mescalero Vice President Fred Peso; and Daniel Dreyfus, director of DOE's Office of Civilian Radioactive Waste Management. While the three witnesses alluded to the federal MRS siting program, each appeared to prefer discussing alternative plans for interim storage.

Peso told subcommittee members the Mescaleros were given a raw deal by Congress, when the tribe, responding to a federal plea for tribes or states willing to host the MRS, stepped forward and volunteered to host the facility in 1991. "Today, I am forced to conclude that our help was never really wanted," Peso said. "In July of 1992, the Mescalero Tribal Council informed the negotiator and the Department of Energy that it was ready to enter formal siting negotiations. We are still waiting for a reply to that offer."

Peso: Federal Process Failed

Calling the process "a failure," Peso described the Mescaleros' plans to proceed with construction of a temporary spent fuel storage facility with the private financial backing of utilities from around the country. "The utilities we are working with will be far more honorable partners than the federal government has been," Peso said.

Dreyfus, reading from a prepared statement, told subcommittee members that while DOE supports the MRS siting process, it is focusing on other waste storage priorities. Under the 1982 Waste Policy Act and its amendments, the department is prohibited from constructing an MRS before a repository host site has been selected.

Dreyfus turned his attention to the Yucca Mountain repository candidate site in Nevada, saying siting of a permanent disposal facility was crucial, both to the success of the MRS and for national utilities fast running out of storage options. "Without significant progress on the repository site investigation, the technical and social problems of near-term storage are magnified."

Currently, DOE is implementing plans for a standardized multipurpose canister (MPC) system to support nuclear fuel transportation, storage and disposal, Dreyfus said. DOE believes the MPC will

provide an immediate response to the lack of spent fuel storage at commercial reactors. He em- phasized DOE is not obligated to take utilities' spent fuel if there is no federal repository in 1998. He said the MPC will help to alleviate some of the urgency of the storage problem.

Stallings told the panel that, as the nuclear waste negotiator, he has narrowed the list of potential host sites down to four Indian nations: the Mescalero Apaches of New Mexico; the Skull Valley Band of Goshutes of Utah; the Fort McDermitt Shoshone Paiutes of Nevada and Oregon; and the Tonkawa of Oklahoma. A Tonkawa representative testified of the tribe's interest in hosting the MRS during the March 17 hearing.

Stallings also told subcommittee members his office is interested in identifying more than one interim storage facility and stressed the importance of siting a permanent repository so there would be no doubt "about the federal government's willingness to solve this national problem."

Spent fuel is not without future economic value, Stallings stressed. "With its metals and energy content, it is foreseeable that one day it will be viewed as a resource," he said. He described various spent fuel applications, such as using it in the treatment of PCBs and industrial waste and irradiating seed corn and potatoes.

However, the negotiator's enthusiasm was not contagious among the subcommittee members. Rep. Peter DeFazio (D-Ore.) questioned the logic of focusing on interim storage when DOE plans to complete a permanent repository. "Why are we here?" DeFazio asked the witness at one point. "Why are we here when DOE probably won't have an MRS built before 2004?"

Testimony from the hearing is available through BPI DocuDial: Stallings, No. 1262, 11 pp.; Peso, No. 1263, 9 pp.; Dreyfus, No. 1264, 12 pp.; and Skeen's statement, No. 1265, 2 pp.

Record -74
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02328958 MINNESOTA LEGISLATURE VOTES NO ON DRY CASK STORAGE FOR NSP Nuclear Waste News March 24, 1994 V. 14 NO. 12 ISSN: 0276-2897 WORD COUNT: 702

Northern States Power Co. (NSP) may be forced to shut down its Prairie Island nuclear plant in Red Wing, Minn., if state legislators continue to deny NSP additional storage space for its spent nuclear fuel.

In 1993, a Minnesota Court of Appeals ruled that the state legislature had the authority to decide whether or not spent fuel should be stored at Prairie Island.

A bill allowing NSP to store the spent fuel temporarily in 17 dry casks was soundly defeated in a Minnesota senate committee on March 15. The committee's action was a further setback for NSP which, since 1992, has been battling environmental groups and the Prairie Island Dakota Nation over use of the interim storage casks.

The bill was sponsored by State Senator Steve Novak, chairman of the Jobs, Energy & Community Development Committee. Novak is committed to helping NSP through this dilemma so that the utility can begin exploring conservation and alternative energy sources, said Novak legislative aide, Jill Sletten. "This (bill) is a good vehicle to use to try to force other utilities to look into other energy options. Sen. Novak is not a proponent of nuclear power but he feels this issue is crucial to Minnesota," said Sletten.

Novak says his motives for sponsoring the bill are purely economic. "If the Prairie Island plant were to shut down tomorrow, the impact on our economy would be enormous," he said. "Five to seven hundred people would lose their jobs, the surrounding area would lose over $22 million a year in property tax revenues, and electric rates would go up dramatically."

Currently, Novak is exploring ways to revive his bill. He has several options: 1) he could offer it as an amendment to a bill either on the senate floor or in committee; or 2) he could negotiate compromise versions of the bill to be offered at a later date. Ultimately, whatever action he takes must happen quickly if he is to keep the companion legislation in the Minnesota House from suffering a similar defeat.

Opponents Attack Program Delays

Testifying at a March 17 congressional hearing on the federal Monitored Retrievable Storage (MRS) program, NSP's chairman and CEO, James Howard, told lawmakers the perception that Prairie Island's dry storage casks eventually would be used for permanent on-site storage most likely will force the plant's closure. "Spent fuel storage at Prairie Island is temporary," said Howard, "yet opponents to our proposal have characterized dry storage at Prairie Island as likely to be permanent, pointing to the repeated delays in the federal nuclear waste management program."

"Without the approval of the Minnesota Legislature in this session, we will be forced to close Prairie Island in 1995 because we will have run out of existing on-site storage," he said.

The hearing was sponsored jointly by the House Natural Resources' Energy and Mineral Resources Subcommittee and its Oversight and Investigations Subcommittee.

Howard told subcommittee members the federal government is to blame for the predicament in which NSP finds itself. If the Minnesota utility is forced to close Prairie Island it will cost NSP an estimated $1.8 billion -- a cost that ultimately will be shouldered by consumers, he warned. "The government's failure to keep the waste program on schedule is threatening electric consumers with unnecessary costs: costs for on-site temporary waste storage and, in the case of Prairie Island nuclear power plant, costs associated with the prospect of having to secure alternative supplies of power if we are forced to close one of our lowest cost power plants before the end of its useful life."

NSP's Feb. 3 agreement with the Mescalero Apache Nation of New Mexico to construct a private MRS on the Mescalero Reservation does not absolve the federal government of its obligation to take the nation's commercial spent fuel, Howard said. But, he added, "The Mescalero/NSP agreement gives electric utilities the opportunity to see if the private sector can do a better job of finding a temporary solution to our waste problems than has the federal government."

Novak's bill, a legislative analysis by the Minnesota Senate Counsel and Novak's statement are available through BPI DocuDial, No. 1266, 12 pp. Howard's March 17 testimony also is available, No. 1267, 10 pp.

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DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02275002 Officials Worldwide Still Struggle To Solve Nuclear Waste Dilemmas Nuclear Waste News March 3, 1994 V. 14 NO. 9 ISSN: 0276-2897 WORD COUNT: 1595

The future of the nuclear power industry is tied to successful resolution of nuclear waste issues, a multinational panel of speakers told the Feb. 28 opening session of this year's Waste Management meeting in Tucson, Ariz. The most difficult problems, however, are not technical, but political and institutional, all panelists agreed. One of the biggest problems is the need to overcome popular myths surrounding nuclear waste.

Contrary to public opinion, radioactive waste in an underground repository is not garbage and is not a liquid sloshing around in drums, said Maurice Allegre, president of the French nuclear waste management company, l'ANDRA. It also is not going to explode like a nuclear bomb. In fact, he said, nuclear waste has one large advantage over chemically toxic wastes - it decays over time.

Another myth about nuclear waste is that it remains deadly for hundreds of thousands of years. This is simply not true, Allegre said. Vitrified high -level waste from spent fuel reprocessing contains fission products which will decay significantly in 500 to 1,000 years and long-lived alpha-emitters, which will continue to emit low levels of radiation for hundreds of centuries. Waste disposal must be designed in such a way that it will protect the public and the environment from release of the fission products in the near future and from the low-level alpha emitters for the indefinite future.

Every Industry Produces Waste

Every industry produces waste - and every industry must face the possibility of a major accident. Allegre called the Russian Chernobyl reactor explosion "the nuclear industry's Bhopal," referring to the chemical explosion in India that brought about millions of dollars in damages and hundreds of deaths.

France is just beginning its second attempt to construct a program to manage high-level radioactive waste. In February 1990, the French government declared a moratorium on ANDRA field work at several sites being considered as possible candidates for the nation's HLW repository.

Ground rules for the new site selection process were established in the French Waste Management Act, passed in December 1991. Under the new law: ANDRA became an independent agency with the responsibility of conducting research in three areas: enhanced actinide separations; waste certification for interim storage; and deep geological disposal aided by work at two underground laboratories, one of which could become the final repository.

ANDRA was given 1.5 billion francs to invest in siting the two laboratories. Twenty candidate areas were eliminated because their geology was not suitable for an underground repository. Finally, four candidate sites were selected, all of which had voted unanimously to host a laboratory.

French Plan Approved Last Month

ANDRA's report recommending continued site investigation at the four sites was submitted to the government in December and approved in January 1994.

Geological investigations of the four sites is expected to take one to two years. At the end of that time, ANDRA will select two sites and recommend these to the government. Preparation of a license application will take an additional year. Once the site is licensed, construction and operation will take 10-12 years. In 2006, the government will decide whether to convert one of the laboratories into a permanent repository. Conversion to a repository will require another act of Parliament.

For ANDRA, the time has come for action, Allegre said. However, action will not come without opposition - on the local, national and possibly international levels.

Strong economic incentives authorized by Parliament plus France's current recession could make site acceptance easier than it would be otherwise. However, public resistance and divisiveness are all but inevitable. About a month ago, the mayor of one of the towns that unanimously approved a laboratory site, committed suicide, supposedly in response to pressure from activists seeking to halt the site, Allegre said.

Germany has not one, but two sets of radioactive waste disposal problems, said Klaus Janberg from the German radwaste company GNS. Germany, split into two parts since 1945, was reunited in 1990.

Former West Germany produces about 23,000 megawatts-electric per year from nuclear power. All reactors in former East Germany have been shut down. Former East Germany has a very large uranium mine that will require remediation. Former West Germany had no uranium mines.

West Germany has had no repository since 1978; therefore it pioneered such nuclear waste volume reduction technologies as supercompaction and liquid evaporation. East Germany licensed a repository in 1978. Volume reduction was not necessary in the East.

West Germany also pioneered melting contaminated scrap metals and using the partially decontaminated molten metal as raw material for nuclear waste casks.

West Germany's Nuclear Waste Act required that spent fuel be reprocessed unless it can be shown to be economically unfeasible. This law has led to one difficult technical problem.

Germany has abandoned its planned reprocessing facility at Karlsruhe, where approximately 80,000 cubic meters of liquid high-level waste remain, awaiting reprocessing. One option would be to ship the waste to reprocessing facilities in France or England; however, shipping liquid high-level waste is considered technically difficult and dangerous.

HLW Transportation Hearing

Germany plans to hold a hearing in Karlsruhe this Fall on transportation and other waste disposal options.

German utilities, meanwhile, are exploring the possibility of final disposal of spent fuel as an alternative to reprocessing. They are petitioning the government to at least examine the direct disposal option as a way of cutting utility costs.

Richard Stallings, the new U.S. nuclear waste negotiator, called for rethinking the way spent fuel is viewed. For the last two or three months, the negotiator's office has been trying to determine whether spent fuel could be viewed as a resource that has value, rather than as "trash" that has only negative impacts, Stallings said.

Stallings criticized his predecessor in the office, David Leroy, saying that Leroy's proposals, which Stallings said amounted to "cash for trash," had almost no chance for success. The negotiators' office has only about one year to make its new approach work, Stallings acknowledged, pointing out that Congress has imposed a sunset deadline of January 1995 on the office.

In order to meet that deadline with a restructured program, Stallings said he refocused his office to include more people with the technical skills needed to do the job, including scientists and environmental lawyers.

Reprocessing Out

The new approach takes as a given that it is not in the best interest of the United States to consider reprocessing at this time. However, there is no reason not to consider spent fuel as a dangerous material that can be handled safely in a controlled facility for 20 to 40 years.

Nuclear medicine and medical applications of the radioisotopes are among the key areas being considered.

Stallings also said his office is getting away from the idea that one, and only one, monitored retrievable storage (MRS) facility is needed.

In some ways, two or three regional MRSs would be better, politically, than a single MRS, Stallings said. If all spent fuel is moved to a single MRS, politicians from outside the area would quickly lose interest in solving the nuclear waste problem. From their perceptions, the problem would have effectively gone away.

An MRS based on the idea that spent fuel has value would be more than just a trash drop-off, Stallings said. It would include such desirable facilities as research parks and state-of-the-art research and technology centers.

Federal Sites Considered

He obliquely referred to the possibility of using federal sites by noting many Department of Energy laboratories have lost their Cold War functions and many military bases are being closed, leaving the areas surrounding them financially depressed.

If a community is asked to take nuclear waste, it will say no; however, if it is asked whether it wants a high-technology research center, it will say maybe, Stallings said.

Stallings said he has been visiting members of Congress to discuss his new view of the MRS. Some have even gone so far as to suggest that the negotiators' office look at a laboratory or military site in their states, Stallings said.

Public mistrust of government is a major problem that must be overcome, Stallings said. He pointed out that, ultimately, Congress will have to be the one to approve a solution to the nuclear waste problem.

Bob Halstead from the Nevada Nuclear Waste Project Office followed up on the question of public trust by asking how any state could trust the federal process when it sees how Nevada has been forced to proceed with site characterization of Yucca Mountain as the repository candidate.

Congress made the decision on Yucca Mountain, Stallings responded, adding he was in Congress when the decision was made, and voted against it. Nevada, however, is "off the table" for an MRS because the Nuclear Waste Policy Act amendments forbid location of both the repository and the MRS in same state.

Stallings expressed some surprise at the number of Native American nations that have responded to the volunteer MRS siting process - four are still active in negotiations. Native Americans, probably more than any other group, have been subject to arbitrary congressional action over the years, he said. However, Stallings also quoted Fred Peso from the tribal council of the Mescalero Apaches, the lead tribe in the MRS negotiations: "This time, we're writing the treaties."

Former Secretary of Energy James Watkins was ready to go back to the old way of designating a facility and forcing it on an unwilling local population, Stallings charged. "Watkins said that the volunteer process was not working; therefore he was just going to find a national laboratory and put it (the spent fuel) there."

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DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02275000 NARUC Offers Storage Options As DOE Indecision Continues Nuclear Waste News March 3, 1994 V. 14 NO. 9 ISSN: 0276-2897
WORD COUNT: 703

Utilities showed increasing frustration at a nuclear waste issues dinner and workshop as Department of Energy (DOE) officials made it clear a high-level waste repository will not be available by 1998 and is not likely to be available for decades to come.

The Feb. 26 Washington, D.C. workshop focused on the nation's spent fuel management crisis and was sponsored by the National Association of Regulatory Utility Commissioners (NARUC).)

Addressing a dinner audience made up of public utilities commissioners and industry representatives, Daniel Dreyfus, director of DOE's Office of Civilian Radioactive Waste Management, stressed the importance of funding to the success of DOE's nuclear waste program. "Increased funding is critical to any forward-moving program we have on the nuclear waste program."

Dreyfus reported the status of the proposed high-level waste repository at Yucca Mountain, Nev. When he opened the discussion to questions from the audience, his remarks were greeted with an angry outburst from one workshop attendee. "What are you going to do concretely (about Yucca Mountain)?...Is there a hole in the ground yet or not?" asked public utilities commissioner John Thomas. Thomas' North Carolina public utilities commission is the second -highest contributor to the Nuclear Waste Fund of all utilities. Dreyfus' response was that there would be "no hole in the ground by 1998."

Dreyfus said the tunnel boring machine is being delivered and the exploratory studies facility will be completed "in a year or so."

Later, during the waste issues workshop following the dinner, Thomas again expressed concerns that DOE was not actively seeking a solution to the problem of nuclear waste storage. "You people have got to help us find a place for our fuel," he told Dreyfus.

Dreyfus, who was seated in the audience observing the panel discussion, angrily rose to explain his position. He told Thomas he faced enormous obstacles as director of the waste management office, and was doing the best he could, given budget constraints. "Respect my position," Dreyfus said, "and respect me, and I'll help you deal with the problem."

The workshop featured a panel of NARUC commissioners who discussed their views on spent fuel management. The commissioners also critiqued a report prepared by NARUC's Nuclear Waste Program Office. The report, based on talks with DOE, examines interim spent fuel storage options. It offered recommendations of various commissioners, utilities company heads and "two individuals from the state of Nevada."

The dialogue on which the NARUC report is based began in September, said Lynn Shishido-Topel, a commissioner from the Illinois Commerce Commission. "The report tries to represent the views of many (although) we did not reach unanimous consensus," she said.

The report, from NARUC's Waste Program Office made the following recommendations:

The federal government (DOE and Congress) should take actions necessary to establish interim off-site storage capability.

The voluntary process, including public and private efforts for locating interim waste storage facilities, should continue.

The federal government (DOE and Congress) should initiate a serious effort to locate and license an interim storage facility at an existing federal site(s).

The DOE spent fuel acceptance rates and the statutory capacity limits of the interim spent fuel storage facility(s) should be increased to allow a level that achieves: 1) a significant reduction in the number of reactor sites that will need to initiate dry cask storage after 1998; 2) a significant reduction in the amount of spent fuel storage capacity expansion at reactor sites already using dry cask storage by 1998; 3) a significant reduction in the period of time spent fuel must remain at reactor sites following permanent shut-down; and 4) acceptance of spent fuel at a rate equal to or greater than it's rate of generation.

DOE needs to take immediate action to ensure the necessary infrastructure exists and will be available when it is needed in order to support the objective of taking title to and removing spent fuel from reactors by 1998.

The Nuclear Regulatory Commission (NRC) should review its regulations for safety to ensure cost-effectiveness of interim nuclear waste storage facilities.

The chief goal of the report was summed up in a statement by one Nevada commissioner, "We need to get beyond the parochial interest of states and take a national interest."

Record -77
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02274987 Dockworkers May Refuse To Handle Spent Fuel Shipments, Union Says Nuclear Waste News February 24, 1994 V. 14 NO. 8
ISSN: 0276-2897 WORD COUNT: 394

Union dockworkers may refuse to handle spent nuclear fuel shipments, according to a new policy of the International Longshoremen's and Warehousemen's Union (ILWU).

"The resolution was specifically aimed at the Department of Energy (DOE) and its import of spent-fuel rods through the Columbia River and Pacific Northwest," said ILWU spokesperson Zack Nauth. The resolution, passed unanimously by the union's International Executive Board, does not direct any ILWU local to refuse the shipments. But the union would submit contested refusals to handle uranium products for arbitration.

While, no union-wide policy on uranium exports currently exists, some unions, such as the Portland, Ore., ILWU local, say they do not want to handle any uranium products. Spent-fuel rods from nuclear reactors are highly radioactive and contain significant amounts of bomb-grade uranium, or U-235. New fuel rods, however, contain only small amounts of U-235. Portland dockworkers have refused to handle shipments of new fuel rods slated for export to Japan.

While the decision of the Portland local is not covered by the ILWU resolution, locals can refuse fuel rods if there is a health and safety concern, said Nauth.

DOE plans to import about 1,000 spent-fuel rods a year, possibly beginning in 1995, from foreign research reactors because the government fears enriched uranium in the rods will be converted into nuclear weapons.

However, no spent-fuel rods from foreign research reactors will be accepted in the United States until completion of an Environmental Impact Statement (EIS) sometime in 1995, said DOE spokesperson Amber Jones. The EIS will address all potential impacts from handling the spent fuel, including worker health and safety concerns.

Earlier, a DOE environmental assessment recommended accepting some spent -fuel rods before the EIS is completed, Jones said. She would not comment on the ILWU resolution supporting workers who refuse to handle spent-fuel rods, although she said DOE "was sensitive to local feelings," and would not attempt to transport uranium through unwilling ports.

The last DOE uranium shipment going through Portland in late January was diverted to another port, and no new shipments have been scheduled, said Mark Driertch of ILWU Local 8 in Portland. Other West Coast ports have refused nuclear cargo for years. The Port of Oakland, for example, has not accepted spent fuel since voters decided to go nuclear-free in a 1986 referendum. The Port Authority implemented the ban in its tariff policy.

Record -78
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02261036 Stallings: Marketing May Be Key To MRS Facility Siting Success Nuclear Waste News February 3, 1994 V. 14 NO. 5 ISSN: 0276-2897
WORD COUNT: 679

The proper marketing strategy may be the key to finding a host for the nation's first monitored retrievable storage (MRS) facility, U.S. Nuclear Waste Negotiator Richard Stallings told a Washington, D.C., seminar on spent fuel management. Given the right set of conditions, a local community could see the MRS as the same kind of desirable facility as the superconducting super collider (SSC), he told the Institute of Nuclear Materials Management meeting Jan. 27.

The key to finding the right host for the MRS depends on how the project "is packaged," Stallings said. One of his first actions in taking over the negotiator's office last year was to analyze some of the problems the office had encountered in the past, he added.

Stallings said his first problem was the lack of staff with technical backgrounds. It has been necessary for the negotiator's office to recruit staff with scientific expertise to keep from having to hire outside consultants.

'Do We Need an MRS?'

Once the new staff was in place, Stallings said he decided to focus on the strategy his predecessor had used in marketing the MRS. He started with a question: "I asked myself, do we need an MRS?"

Stallings' answer came two weeks ago in the form of the arctic blast that swept the nation and caused rolling brown-outs throughout the East Coast. "Folks, we almost ran out of power last week," he said. "Environmentalists say we can get there by conservation - (that) we can wrench down 20 per cent (in power usage) by conservation...Hogwash! We need to focus on long-term energy."

Without an MRS and with an ever-increasing demand for energy, Stallings believes the United States soon will face black-outs rather than brown -outs. The MRS, he said, "is essential for the nation's well-being and for the future of the (nuclear power) industry."

Stallings did not address the status of MRS negotiations with the Mescalero Apache Nation, one of four tribes expected to volunteer to host the facility. When asked about his reaction to news that the Mescaleros were privately negotiating with utility companies, (NWN, Dec. 23, 1993, p. 497), Stallings turned to Mescalero Tribal Council representative Fred Peso and said, "you might be breaking some ground that might be beneficial to both our interests." However, he did not elaborate further.

Alternatives to a volunteer state or Indian tribe hosting an MRS cannot be ruled out, particularly the option of siting the facility at one of the Department of Energy's national laboratories, said Stallings. "The national laboratories are running out of projects and a number of these labs have lost missions."

The possibility of using spent fuel productively is one avenue Stallings said he is exploring. He has met with researchers from around the country and said he is excited about possible applications for spent fuel, including the irradiation of potatoes and production of ozone for use in water treatment. "We don't know exactly when all this will come (about), but we can do something interesting with this material that will make it attractive to the communities (interested in hosting a spent fuel facility)," he said.

Stallings said he would also like to see more money earmarked for this type of research, adding that his next step will be to meet with several possible investors in order to make them aware of the possibilities.

Describing his office as "happily working with DOE," Stallings said the department has been very cooperative. Currently, DOE and Stalling's office are negotiating an inter-agency agreement that would give "more clout" to the negotiator's office. Under this agreement, DOE would transfer funds from its Phase II-B grant program, which provides possible host communities with money for site feasibility studies, to the purview of the negotiator's office.

Stallings was skeptical about the future of spent fuel reprocessing in the United States, saying he doubted reprocessing had a chance in the foreseeable future. One reason is the widespread fear that reprocessing would increase the world plutonium supply. However, one of DOE's project offices "is working on a product that will make proliferation impossible."

Record -79
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02261035 O'Leary Orders Repository Project Financial Review Nuclear Waste News February 3, 1994 V. 14 NO. 5 ISSN: 0276-2897
WORD COUNT: 200

Energy Secretary Hazel O'Leary began a four-month financial review of the Yucca Mountain, Nev., high-level radioactive waste repository project Jan. 27.

The review will encompass financial and business management techniques, the project schedule and the credibility of project milestones, contracting practices, internal planning processes and organizational effectiveness. It also will examine the adequacy of program funding levels and priorities, including infrastructure costs.

A two-member intermediary panel has been set up to select the management consulting firm to conduct the review and oversee the review itself. One member was appointed by Nevada Gov. Bob Miller (D) and the other by O'Leary.

Miller picked Judy Matteucci Sheldrew from the Nevada Public Service Commission. Sheldrew has been state budget director since 1989. During that time, she became the first woman to serve as president of the National Association of State Budget Officers.

O'Leary selected Alex Radin, president of Radin & Associates, a Washington, D.C. energy policy consulting firm. Radin spent 35 years as executive director of the American Public Power Association, a national association representing more than 1,750 municipal and other public power utilities. Radin chaired a congressionally mandated review of the spent fuel monitored retrievable storage concept in the late 1980s.

Record -80
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02261034 NARUC: More NRC Flexibility Needed On Interim Storage Nuclear Waste News February 3, 1994 V. 14 NO. 5 ISSN: 0276-2897
WORD COUNT: 360

The Nuclear Regulatory Commission should be more open-minded and flexible when considering interim storage options, said Cas Robinson, nuclear waste program director for the National Association of Regulatory Utility Commissioners (NARUC).

Robinson met with the NRC commissioners Jan. 26 to describe his office's mission and share NARUC's perspective on the status of the Department of Energy's Nuclear Waste Program.

After his initial presentation, the commissioners invited Robinson to share some of the state utility regulators' concerns. Tentatively, he referred to the lack of interim storage, which he described as a crisis. He called on the commissioners to endorse exploration of interim geologic storage in addition to above-ground storage saying, "perhaps the two can be combined."

NARUC members also would like the NRC to be open to new approaches. "Just because it's the way you've done it doesn't mean it has to always be done that way," he said

The money utilities have contributed to the Nuclear Waste Fund seems to buy nothing because of the DOE's lack of progress in finding interim storage, Robinson said.

"State regulators have thus far permitted these utilities (contributing to the fund) to recover this expense from the ratepayers," Robinson said. "But there is concern on the part of state regulators, which is continuing to intensify, that, because of the uncertain progress in DOE's development of the waste program, the ratepayers may be asked to pay twice for the same service."

It was this concern that prompted the creation of NARUC's technical review office several years ago. The office in 1993 was converted into the nuclear waste program office in Washington, D.C. It focuses on policy issues pertaining to DOE's waste program and tracks developments "related to the storage and disposal of spent nuclear fuel." The office also monitors pending nuclear waste legislation and represents "NARUC's interest with the Department of Energy, other governmental agencies and other relevant stake holders."

Robinson praised DOE Secretary Hazel O'Leary for doing what he described as "an outstanding job." "There is a great appreciation for Secretary O'Leary (among NARUC's commissioners)...she's very informed. She's giving it (nuclear waste) attention disproportionate to the size of her budget," he said.

Record -81
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02252573 Apache Official Blasts Federal HLW Policy; Sees Private MRS Nuclear Waste News January 27, 1994 V. 14 NO. 4 ISSN: 0276-2897
WORD COUNT: 470

The politics of nuclear waste has become a game of "let's pretend," Fred Peso from the Mescalero Apache Tribal Council told a nuclear waste technical seminar in Washington, D.C., Jan. 26. Congress and the Department of Energy have put a lot of money into appointing, negotiating and studying - and almost nothing into getting the job done, Peso told the Institute of Nuclear Materials Management's Spent Fuel Seminar.

Peso admonished DOE and the media for constantly repeating the myth that NIMBY (Not In My BackYard) makes any action on nuclear waste almost impossible. The Mescaleros have been "ready to strike a deal" with DOE for more than a year and a half on siting a monitored retrievable storage (MRS) facility on the tribe's New Mexico lands. "Our door is still open and our phone is still listed," Peso said.

Opposition Overstated

Local, non-Apache opponents of the MRS have been "few and loud," Peso said. The majority of New Mexicans support the tribe's sovereign right to negotiate for the facility, whether or not they like the MRS, he said, pointing to a 1993 poll in which 70 percent of the respondents backed the Mescaleros.

New Mexico politicians, however, are another matter. For 50 years, the state has received billions of dollars for hosting nuclear facilities - including Los Alamos National Laboratory, Sandia National Laboratory, the Waste Isolation Pilot Plant and White Sands. They only wanted to close the door when the Mescaleros sought to become a player in their own right, Peso said.

Sen. Jeff Bingaman (D-N.M.), who introduced an amendment last August cutting off funding for Phase II-B grants to MRS candidates, was willing to sacrifice Apache sovereignty to what he saw as short-term political gains in his bid for a third term, Peso said.

While the Mescaleros recently sent a letter to the negotiator reaffirming their willingness to negotiate a contract for a federal MRS, they also are talking with a group of utilities about hosting a private MRS paid for by the utilities, Peso said. In fact, he said, the utilities are better business partners than the federal government. They are serious and are ready to move.

Peso declined to give any details about the utility negotiations, including the names of the utilities involved, but stress that 10-12 utilities - firmly committed - would be sufficient to launch the project. "If an MRS is licensed and built, others will come."

A private MRS facility could be licensed in two to three years at a cost of $10 million, "including lawsuits," Peso said. General Electric's Morris, Ill., facility has set the precedent for a private, stand-alone spent fuel storage facility. Also, the laws governing Indian sovereignty are much stronger in the case of a private facility than a federally sponsored facility. "We may be accepting limited shipments by 1998," he concluded.

Record -82
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02252569 Minnesota Legislature To Consider Prairie Island Dry Storage Site Nuclear Waste News January 27, 1994 V. 14 NO. 4 ISSN: 0276-2897 WORD COUNT: 248

Northern States Power's (NSP) Prairie Island nuclear plant may have to close down, permanently or temporarily, if the Minnesota legislature does not act this spring to allow the utility to begin operating an independent spent fuel storage installation (ISFSI) at the plant site, said John Closs, nuclear consultant to NSP, said Jan. 26. The utility has only enough room left in its fuel pool for one more refueling.

In December 1993, 75 free spaces remained in the pool. The next scheduled outage is May 1994, when 48 assemblies will be removed from the reactor and placed in the pool, leaving 27 free spaces. These remaining spaces will not be sufficient for the planned June 1995 outage, when an additional 48 assemblies will be removed. At this point, NSP's options would be to close the plant, reload 27 assemblies or reduce power output.

A utility study estimated the cost of closing the plant, including providing power from alternative sources, would be $1.8 billion, not including job losses.

NSP is caught in an unusual political situation. In the summer of 1992, the state public utility commission gave the utility the go-ahead to build and operate the ISFSI. However, following the commission's decision, a coalition of activist groups filed suit in the Minnesota Appeals Court.

The appeals court ruled the commission had acted promptly, but determined the storage facility was a "spent fuel repository" which required legislative sanction. The state legislature will return for an eight-week session, beginning Feb. 22.

Record -83
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02249657 Mescaleros, NSP Agreement Lays Foundation for Private MRS Nuclear Waste News February 10, 1994 V. 14 NO. 6 ISSN: 0276-2897 WORD COUNT: 763

Northern States Power (NSP) and the Mescalero Apache Nation of New Mexico signed an agreement Feb. 3 paving the way for construction of a much-needed Monitored Retrievable Storage (MRS) facility on the Mescalero Reservation.

The Mescaleros engaged in private talks throughout January with the Minnesota utility after Congress tied the hands of the federal Nuclear Waste Negotiator by cutting off funding for further MRS feasibility studies under a federal grant process.

Through a last minute amendment to the 1994 Energy and Water Appropriations Bill, Sen. Jeff Bingaman (D-N.M.) succeeded in blocking allocation of funds for Phase II-B grants, which would have provided $1.8 million for site feasibility studies, geologic analyses and public outreach programs. (NWN, Dec. 23, 1993, p. 497)

'A Significant First Step'

The NSP-Mescalero agreement is billed as a significant "first step" by both parties, but both concede NSP will have to recruit other utilities to sign on to the partnership if MRS construction is to get underway. "We need to go out together to identify 10 to 12 utilities" willing to become parties in the effort, said Mescalero spokesperson, Miller Hudson. Without the pooling of resources to fund the project, "there would not be adequate revenues to the tribe," Hudson said.

An NSP spokesperson said the company has taken steps to enlist the support of other utilities. "We'd like to have as many utilities as possible," said Laura McCarten, Regulatory Projects Manager. NSP is inviting "the whole nuclear industry" to a working meeting on the Mescalero Reservation that will outline a business plan "to put together a license application to the NRC" for an MRS on Mescalero lands, she said.

NSP also will solicit the utilities "to get seed money" to fund the project. "A letter has gone out to the heads of all the nuclear utilities," inviting them to the meeting scheduled for March 10 and 11 in Mescalero, N.M., McCarten said.

The NSP-Mescalero agreement is especially good news for NSP, which will soon run out of storage capacity for spent fuel at its Prairie Island facility in Red Wing, Minn. As a result, NSP has petitioned state legislators to allow the utility to store more spent fuel in dry casks at Prairie Island. "Without additional on-site storage, the plant, which supplies 20 percent of the utility's output, would be forced to shut down beginning 1995," NSP officials said.

A Minnesota state law requires NSP to seek state utility commission approval for any expansion of its nuclear waste storage facilities located in the state.

"Several years ago, we investigated what would be the best way to meet our need for additional storage," McCarten said. The result was construction of an on-site independent spent fuel storage installation (ISFSI), which would temporarily house NSP 's spent fuel at Prairie Island before it reached storage capacity in its last remaining spent fuel pool.

NSP was required to apply for an NRC license and a Certificate of Need (CON), a state permit. The company was granted the CON from the Minnesota Public Utility Commission in June, 1992 and was allowed the use of 17 casks for interim dry storage. The number of casks fell short of NSP' s original request.

The company was dealt a blow, however, following the commission's action. Several environmental groups opposed the commission's decision and filed suit to have it overturned. A June 1993 ruling by the Minnesota Court of Appeals upheld the commission's decision, but ruled that the issue of on-site storage of spent fuel fell under the purview of the state Legislature. (NWN, Jan. 27, p. 37) Hearings Planned

The Minnesota legislature convenes Feb. 22 for an expected six-week session. State Sen. Steve Novak chairs the Jobs, Energy & Community Development Committee, one of four committees overseeing legislation involving NSP's on -site interim storage. Currently, the senator is conducting federal hearings, meeting with the Mescaleros and with the Nevada Nuclear Waste Task Force, according to McCarten. "He decided it (spent fuel storage) was a big enough issue to merit hearings," she said. "We have been working very hard so that legislators have the information."

NSP's request for on-site interim storage at Prairie Island is a temporary stop-gap measure, since the utility will be forced to again petition the state legislature for permission for expand dry storage at the facility once it has filled the 17 dry casks. "An MRS is a practical alternative," said NSP Chairman Jim Howard. "But because it would not be available until 2002, we still need legislative approval to store used fuel onsite at Prairie Island at least until that time."

Record -84
DIALOG(R)File 636:IAC Newsletter DB(TM) (c) 1996 02249656 DOE Civilian Waste Management Up 40 Percent; Special Fund Sought Nuclear Waste News February 10, 1994 V. 14 NO. 6 ISSN: 0276-2897 WORD COUNT: 1208

The Department of Energy, as part of its $18.5 billion fiscal year 1995 budget request, released Feb. 1, seeks $532.9 million for civilian radioactive waste management activities, a 40 percent increase over this year's appropriation of $380.7 million. The department also has drawn up a proposal - which must be approved by Congress - to take a portion of new money coming into the Nuclear Waste Fund off budget. This would make more money available for DOE to speed up its site characterization at the Yucca Mountain, Nev., high-level waste repository candidate site.

The new funding approach would provide access to an additional $1.3 billion through 1999, primarily to determine the suitability of the Yucca Mountain site and to develop technologies to address near-term storage issues, Dan Dreyfus, head of the Office of Civilian Radioactive Waste Management, said at DOE's Feb. 7 news briefing.

The civilian radioactive waste management program now is funded through three sources: the Nuclear Waste Fund; the Defense Nuclear Waste Disposal appropriation; and a comparatively small appropriation for the civilian radioactive waste research and development program.

The FY '95 request is comprised of $254.8 million from the Nuclear Waste Fund (down from $260 million in the FY '94 appropriation); $129.4 million from the Defense Nuclear Waste Fund (compared to $120 million appropriated in FY '94) and $148 million from the proposed special fund. The budget request also includes a separate $700,000 appropriation for civilian waste research and development, the same amount that was appropriated last year.

The Nuclear Waste Fund was established by the 1982 Nuclear Waste Policy Act and is composed of payments made by generators and owners of spent nuclear fuel and high-level nuclear waste to ensure that the costs of carrying out activities relating to disposal will be borne by persons responsible for generating the waste. The fund consists primarily of fees paid by electric utilities at the rate of one mill per kilowatt hour of nuclear electricity generated and sold. The federal government also made payments to the fund.

For FY '95, authorization language will be submitted to Congress in about two weeks to establish a special fund that will provide additional money for the program by using an additional portion of each year's utility fees, Dreyfus said.

Under this proposal, monies would continue to be requested from the Nuclear Waste Fund; however additional funding would be provided by placing a portion of the utility industry's annual payments into the revolving fund. The new revolving fund account only would involve new money coming into the Nuclear Waste Fund, Dreyfus said. Dreyfus joked that he was the only person in town who understood the idea, and he couldn't explain it.

Now, utility receipts not appropriated for the program each year are retained in the fund, but are not available for obligation. Under the proposal, one -half of the annual balance will be made available for obligation on a permanent basis. These additional resources would be used to accelerate scientific and engineering activities at the Yucca Mountain, Nev., high-level radioactive waste repository candidate site.

The additional spending associated with this proposal would come from savings associated with decisions of DOE and the U.S. Enrichment Corp. (USEC) involving: (1) production efficiencies at the federally owned enrichment plant; (2) new marketing opportunities for the corporation to sell enriched uranium derived from highly enriched uranium available to the USEC, and (3) additional opportunities to sell (wheel) excess electric power to consumers, said DOE's summary report of the FY '95 budget request.

A separate proposal for Defense Nuclear Waste disposal was established as part of the FY '93 Energy and Water Development Appropriation (P.L. 102-377) in lieu of payment from the federal government into the Nuclear Waste Fund. This money is payment for the eventual disposal in the repository of vitrified high-level waste from DOE's nuclear weapons facilities.

Program emphasis is on the earliest possible determination of the suitability of Yucca Mountain site for a repository. DOE seeks "visible and consistent progress in underground exploration," while continuing on-going surface-based investigations, the budget summary said.

Yucca Mountain Site Characterization: The FY '95 request would provide $381.2 million (compared to $259.5 million in FY '94) to continue characterization of the Yucca Mountain site, including excavation and tunneling related to construction of the Exploratory Studies Facility (ESF) and on-going surface tests.

ESF construction will use three-shift operation of a tunnel-boring machine to support a planned advance rate of 375 feet per week. The goal is to attain the main test depth in FY '95, Dreyfus said. The FY '95 site characterization budget request also would fund procurement of an 18-foot tunnel boring machine and mining excavation equipment.

Spent Fuel Storage: The FY '95 request provides $30 million for spent fuel storage related activities, almost double the FY '94 appropriation of $14.5 million. This includes funding for development of a Multipurpose Canister System (MPC), intended to meet requirements for storage, transportation and eventually disposal, using different overpacks for each function.

Monitored Retrievable Storage: No money in the FY '95 request is earmarked for the monitored retrievable storage (MRS) program, although the budget summary notes that "the Office of Civilian Radioactive Waste Management would continue any viable Monitored Retrievable Storage siting initiatives."

DOE maintains the ability to regenerate the program if an MRS site is selected, "one way or another," Dreyfus said. He pointed out that DOE has no line-item for Phase II-B grants, since Congress cancelled that program. However, his office is "talking to the (Nuclear Waste) Negotiator" on the negotiated site selection process. "Congress didn't say we could assist the negotiator," Dreyfus said.

Transportation: The transportation system request of $21 million (compared to $14.2 million in FY '94) provides for development of the MPC transportation overpack and continued cask design activities. A pre-certification advanced technology truck cask will be acquired for use in design confirmation, operational testing and public information activities.

Waste Acceptance: DOE has requested $6.0 million for waste acceptance activities (compared to $3.1 million in FY '94) to manage the Standard Disposal Contract, establish and verify fees paid into the Nuclear Waste Fund and analyze the adequacy of the 1 mill/kW-hr Nuclear Waste Fund fee.

Funding also would be provided for:

Quality Assurance Program: $14.1 million, compared to $13.2 million in FY '94;

Systems Integration And Regulatory Compliance: $12.7 million, compared to $12.1 million in FY '94;

Program Management: $67.3 million, compared to $63.3 million for FY '94. This includes federal salaries, benefits and travel, strategic planning, international program support, external relations, program control and administration and information management.

Waste R&D: The R&D request is intended to develop and demonstrate new technologies that allow an increase in the current at-reactor storage capacity and to provide for generic research and development in spent fuel storage. The $700,000 requested for FY '95 provides for continued monitoring of casks containing spent fuel from dry storage demonstration projects and long-term spent fuel storage R&D at DOE's Idaho National Engineering Laboratory, Idaho Falls.

% DOE's complete breakdown of its FY '95 budget request for the civilian nuclear waste program is available through BPI DocuDial, 91 pp., No. 1135.